



COLOURS OF WAR



PAINTING WORLD WAR II
& WORLD WAR III MINIATURES



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Working with Vallejo we have designed a range of paint sets that cover all of the main nations in *Flames Of War*, the *World War II* miniatures game and *World War III: Team Yankee*.

These sets give you all the main colours that you will need to paint your army.



WORLD WAR III

AMERICAN PAINT SET



70203

GERMAN ARMOUR PAINT SET



70205

GERMAN INFANTRY PAINT SET



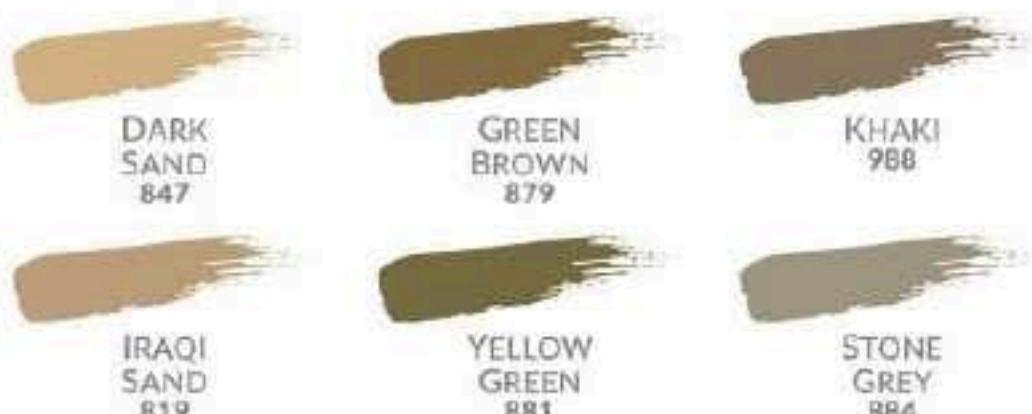
70206

GERMAN SS PAINT SET



70207

EL ALAMEIN PAINT SET



70208

BRITISH PAINT SET



70204

SOVIET PAINT SET



70202

ITALIAN PAINT SET



70209

The Utility set contains a lot of the core colours needed for painting both WWII and WWIII miniatures.

Combine it with one of the nation specific paint sets and you will have all of the basic paints for that nation

UTILITY PAINT SET



70201

World War III

US PAINT SET



70220

BRITISH PAINT SET



70222

NATO PAINT SET



70223

SOVIET PAINT SET



70221

EAST GERMAN PAINT SET



70224

TOOLS & PREPARATION

Proper preparation and assembly is essential to a well-finished miniature. An unsightly mould line or piece of flash left can spoil the result, no matter how good the paint job is. Before you can begin producing miniature masterpieces, let's look at a selection of some of the basic tools you will require.

PAINTBRUSHES

The most important painting tool is obviously a selection of good brushes. Many beginning painters assume that to paint well, they should use the tiniest brush they can find. In fact, the size of the brush you use is much less important than the shape. For detail work, the bristles of the brush should come to a sharp point. The Drybrush is, as its name suggests, designed especially for the drybrushing technique (see page 14).



HOBBY KNIFE

For trimming parts and cleaning casting imperfections before assembly. Using a new, sharp blade is actually safer, because you will not need to apply as much force and you are less likely to slip and cut yourself. In any case, remember to always cut away from yourself.



CLIPPERS

For removing parts from sprues and trimming larger pieces of unwanted material. The flat bottom of the blades lets you get right up close to the model. With plastic parts, though, it is advisable to clip slightly away from the model and trim the excess with the hobby knife, to avoid leaving a scar or mark on the surface.



FILES

Also very useful for cleaning parts and making sure everything fits well. They are more effective than a hobby knife at ensuring a smooth, flat surface along straight edges, especially with hard resin parts.





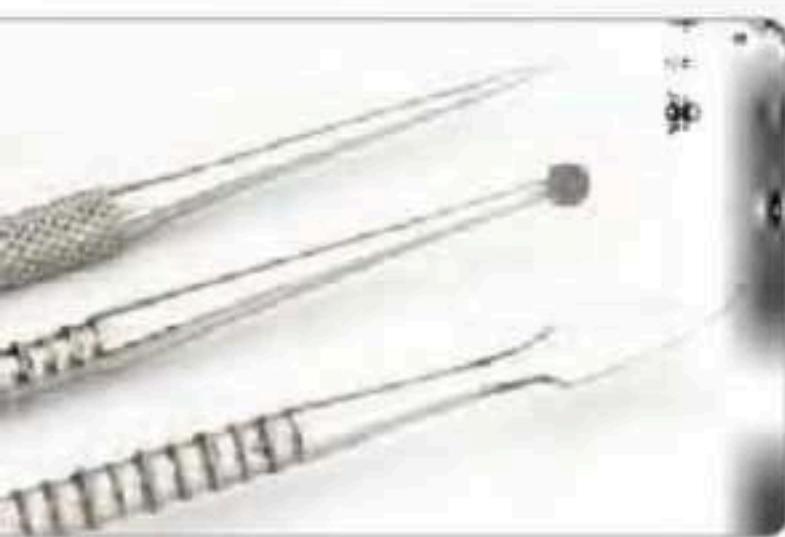
PIN VICE

For drilling out small holes in gun barrels and muzzle brakes, etc. Also an ideal way to strengthen fragile joints between parts, by 'pinning' with a piece of metal rod.



TWEEZERS

For handling and manipulating small parts. These can be indispensable, especially when gluing together models. Often you will find that even if you can position a smallish part quite comfortably with your fingers when dry fitting, it gets much more difficult once glue is involved.



SCULPTING TOOLS

Great for shaping epoxy putty (Green Stuff or Grey Stuff). Epoxy putty is great for filling unwanted gaps. And, if you feel like a creative challenge, perfect for adding custom details and modifications to models.



AIRBRUSHES

An airbrush is a wonderfully useful tool that can really help with a lot of painting tasks. It is considered almost indispensable by larger-scale modellers.

However, investing in an airbrush and compressor is a big decision. Many inexpensive models are available, and while they may seem like a bargain, you get what you pay for. Most cheap airbrushes come with a variety of pitfalls and difficulties that are likely to frustrate and discourage novice users.

A good-quality airbrush and compressor will cost hundreds of dollars at least, and may in fact be the biggest single hobby investment you make.

An airbrush can speed up undercoating, basecoating, highlighting, and allow you to easily paint soft-edge camouflage schemes. But they are certainly not a required piece of equipment.

In fact, airbrushing is such a broad subject that it lies outside the scope of this book, so we will not be covering it in detail.

There are plenty of how-to guides available online if you want to know more.



AIRBRUSHES AND VALLEJO PAINTS

If you already own an airbrush, or if you decide to add one to your hobby arsenal, then you can use it to apply Vallejo paints without difficulty. You can thin Vallejo Model Colour paints to a suitable consistency with Vallejo Airbrush Thinner (71.161) or with Vallejo Airbrush Cleaner. Airbrushing with Vallejo paints makes it easy to ensure an exact match, which may not always be the case if you use a mix of paint ranges. Vallejo also make a range of Model Air paints, specifically for airbrushing, if you want to go that route, however these are challenging to brush paint with.

ASSEMBLING PLASTIC MINIATURES



Battlefront's *Flames Of War* and *World War II: Team Yankee* miniatures are quick and easy to assemble. Vehicle box sets often include parts to build multiple vehicle types, and some plastic frames are common across different box sets. Each box has a parts guide showing what all the options are. This guide and the pictures on the box should be all you need to assemble your vehicle.

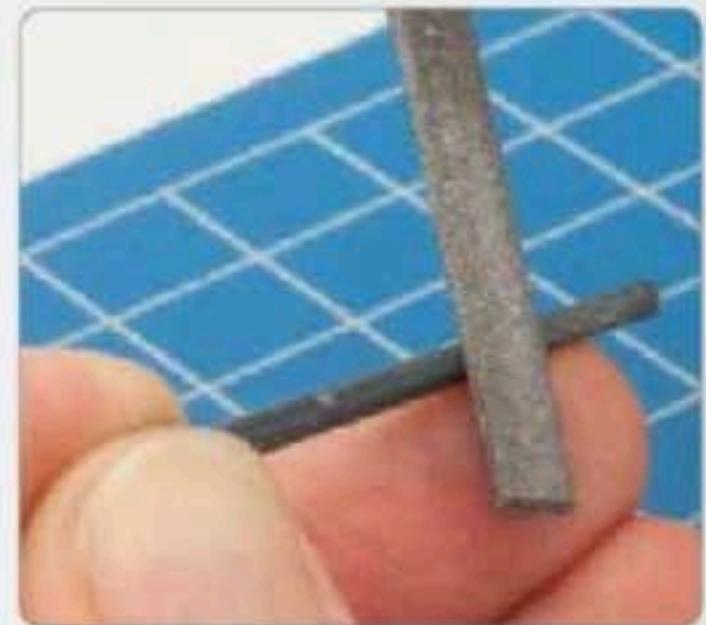
However, if there is something you're unsure of, every box set has an in-depth step-by-step guide on our website. Simply scan the QR code to go straight to the product spotlight.



REMOVE PARTS FROM THE FRAME using a pair of plastic cutters. Place the flat edge of the cutters against the part you want to remove and snip. To avoid damaging parts, it pays to leave a bit of extra sprue on the piece and clean it up later with a knife.



TRIM THE PART using a hobby knife to carefully shave the feed point off the components.



MOULD LINES can be easily cleaned off by scraping with a sharp knife gently along the surface.

On larger pieces like gun barrels, using a file will help to give a smoother finish.



TIP - CLIP THE FRAME: For small components like AA machine-guns, it pays to cut the frame into pieces first; sometimes clipping the part straight from the frame creates enough stress to damage the part you are clipping out.



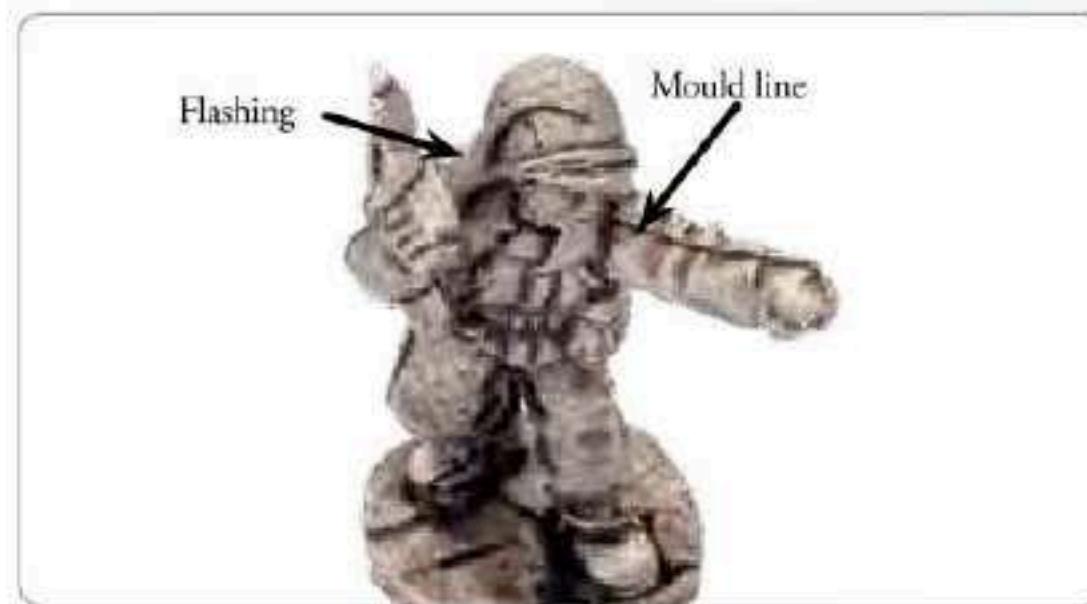
DRY FIT! One of the most important things to do is test-fit the pieces before applying any glue. This will ensure that you spot any fitting issues that may ruin your finish, like in the example above where some feeds haven't been trimmed properly and are preventing a clean join.



GLUE: Once you are happy with the fit, apply the appropriate glue sparingly to the parts and press together. Polystyrene cement is the best choice for joining hard plastic pieces, as it will melt the plastic slightly and weld the parts together.

ASSEMBLING METAL AND RESIN MODELS

While the *Flames Of War* and *World War III: Team Yankee* plastic range is getting larger all the time, a portion of the Battlefront Miniatures range is made up of kits combining resin, metal, and plastic parts.



Mould lines and flashing are unfortunate side effects of the casting process, but are easily cleaned off. The miniature above has been selected to show particularly bad mould lines. Should you ever find a model like this, get in touch with us at customerservice@battlefront.co.nz so we can replace it with the quality model you should be getting in every pack. Most of the time, a scrape with a hobby knife or a small amount of filing with a needle file is all that is needed to clean up a metal figure.

You can use the same techniques to clean up the pieces as you would for plastic parts, however there are a few other tips and tricks to use.



Battlefronts produces infantry in the same hard plastic as our tanks, and a slightly softer plastic that allows us to design the figures without the compromises that have to be made for hard plastic, since the softer plastic is able to flex as it comes out of the mould.

Unlike metal miniatures, where you scrape mould lines to clean them up, with the plastic figures it is better to cut the mould lines off.



The metal and resin components of your Battlefront miniatures may have some residual powder or oils on them from the casting process that need to be cleaned off to allow the paint to adhere properly to the surface. You can clean it off easily with warm soapy water.

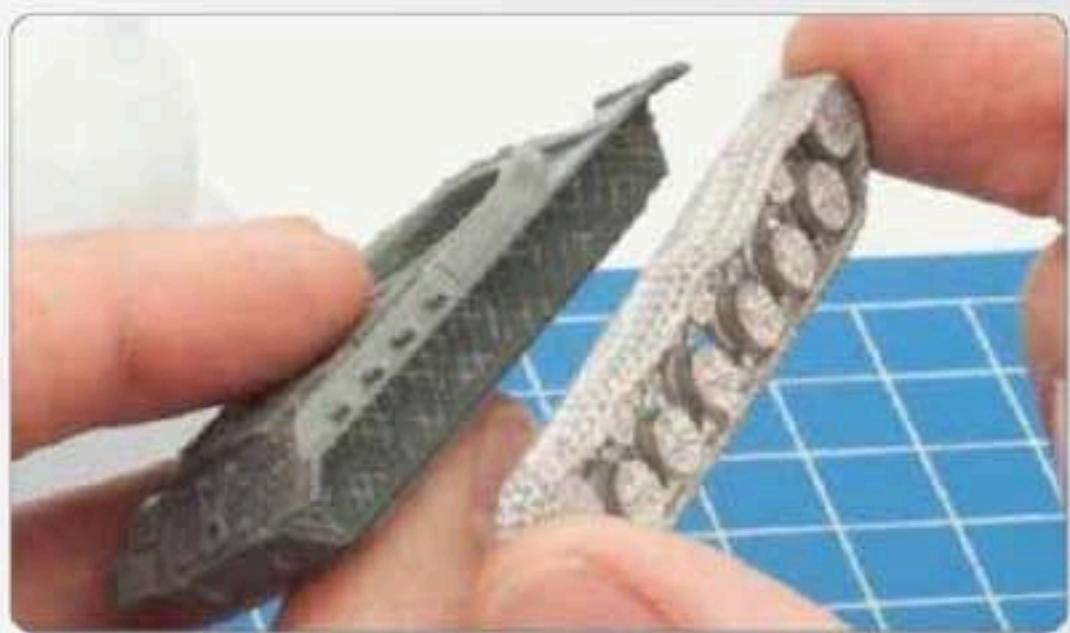
Any imperfections in the resin or metal parts should be carefully removed with a hobby knife or file. This may result in a chunk of resin snapping off.



TEST-FIT! TEST-FIT! TEST-FIT! Due to the nature of metal and resin and their interaction there will sometimes be some extra work required to make adjustments to get the best fit possible - the odd bump or lump filed off, metal part straightened, etc. But it's worth that time and effort to make sure the final tank or AFV looks great after the paint goes on. Be sure to test fit again after you make any modifications.



For the strongest bond, we recommend scouring lines on any large flat surfaces that need to be glued together. Before gluing any parts together make sure that they are clean of any dust or resin shavings.



Apply superglue sparingly and press the parts together and hold for a few seconds. If you want a faster bond, apply superglue to one piece, and accelerator to the other before pressing the parts together.

UNDERCOATING MINIATURES

Undercoating is a vital step in the painting process. Just as a house needs a strong foundation, a good paint job needs a smooth, durable undercoat to make it easier to apply the colours, and to stop your hard work from chipping or rubbing off. The first layer of paint needs to adhere to the material of the model and provide a smooth, even surface for the subsequent layers. It doesn't matter what type of paint you use, as long as it provides a tough, matt surface without filling in or hiding details on the model.



Every hobbyist has a favourite undercoating technique, but the most common is a sprayed-on black undercoat from an aerosol can. That way if any spots are accidentally missed, they will be dark and inconspicuous. Some painters prefer white or grey primer, because it gives colours a brighter finish, while colours sometimes appear more muted when applied over black.



Before spraying your miniature, make sure you read the instructions on the spray can. Most importantly, shake the can vigorously for about a minute to mix the paint with the propellant.

To spray your models, hold the can about 8"/20cm away from your miniatures and spray across the models in short, controlled bursts.



You don't need to cover your miniature in paint all in one go. If you apply paint too thickly, it can pool in the recesses and clog up the detail. It is better to apply two or three light coats, each time spraying from a different angle.

If you are brushing on a basecoat (see page 12) a good rule of thumb is to paint dark colours like Camouflage Olive Green over a black undercoat, and light colours like Dark Sand over a white or grey undercoat.

Vallejo coloured primer cans are an ideal option. They save you time by priming models in an exact colour match for the appropriate paint colour.



Always undercoat the difficult places to see and reach first. We usually start by turning vehicles upside down for the first coat of paint.

TIP: There is enough pressure in a spray can to blow light plastic miniatures around, so consider sticking them down to your spray surface with double-sided tape.



No matter how much you try, you'll never get spray paint into every nook and cranny.

Once you're happy with the spray undercoat, use a medium brush and some black paint or appropriately coloured paint to touch up anywhere that the spray undercoat missed.

MOUNTING FOR PAINTING

There is an age-old debate among miniature painters—do you mount the miniatures on their bases before or after they are painted? There is no right answer to this question. The method you use totally depends on what feels comfortable to you.



Mounting infantry miniatures individually on strips of card, popsicle sticks, or even small bases allows you to handle them and have easy access to painting them without any of the miniatures being obscured by any other. You can space them out enough to allow room to paint every detail on each miniature. This is how we have painted many of the miniatures in this book.



Another popular method for mounting infantry (and guns and tank turrets, for that matter) is gluing each one, or attaching it with Blu-Tack, to a handle such as piece of dowel, a large nail or a clothes peg. The handles can be slotted into pre-drilled holes in a piece of wood to hold them upright while they are drying between layers of coats.



Heavier miniatures like tanks can also be mounted on any convenient handle, such as old paint bottles or a larger section of dowel. Make sure the handle is large and heavy enough that the tank won't be too top-heavy. The handle lets you keep fingers away from the models during painting, and allows them to be set down for drying without damaging the paint.



Some painters prefer to mount their miniatures on their final bases before painting, as their style doesn't require lots of detail work and this saves a step later. Many painters that use this method add the filler to the base (see page 17) before painting and then paint the miniatures and base together.

EXPERT TIP

Some resin and metal tanks have fenders and mudguards attached to their tracks. Glue these to the chassis of the tank during the assembly stage.

A trick for other tanks, like the plastic Panzer IV to the right, is to leave the tracks off the tank and paint them separately. This will make it easier to paint them as you'll have better access to the tops of the tracks.

You can use the same trick for Schürzen (armoured skirts) and paint them on the sprue.

To get the strongest bond, scrape the paint off surfaces you are gluing; otherwise you will be gluing paint to paint and your miniature is more likely to break.



THE COLOURS OF WAR PAINTING SYSTEM

Whether you have never painted before or have years of experience, this book is a tool to help you get the most out of your *Flames Of War* and *World War III: Team Yankee* models. Our books have always had basic painting guides, but we have never been able to provide as much information as we would like. Working with Vallejo has opened up a massive paint range that they have been developing and refining for decades. We have scoured their paint range and come up with a collection of sets that cover all of the basic colours you need to paint your armies for the tabletop.

Vallejo paints are high-quality acrylic paints that have a very high pigment content to make it easy to achieve an even coverage with rich, solid colour. The colours have been fine-tuned with wargaming miniatures in mind - historically appropriate, yet vibrant enough to stand out on the gaming table.

We took all of the colours that always seem indispensable, no matter the army, and combined them into a universal core set: the Utility Set. Then each of the major nations has its own colour set, with the correct colours for their unique equipment.

With just the Utility and the appropriate nation-specific set, you will have all the colours you need to paint your army. Certain intermediate and advanced tasks will use a wider variety of colours, so over time you may wish to expand your paint collection with additional sets, or specific individual paints from the Vallejo Model Colour range (see page 135) giving you more

options and versatility. To paint a standard army, those two sets should be all you need.

World War II Germans have a lot of variety and colour in their equipment, so they have three sets - one for infantry, one for SS infantry, and one for tanks and other vehicles.

Armies for World War III tend to have more complex paint schemes, so tend to have slightly larger paint sets.

It should go without saying that all of the suggestions in *Colours Of War* are open to interpretation. If you have your own ways you prefer to paint certain items, then by all means integrate those as you wish and feel free to experiment.



HOW TO READ THE PAINTING GUIDES

Colours Of War painting guides begin with a list of the paint colours you will need for that task.

Each individual step includes several key pieces of information, including a colour swatch, suggested brush size and a brief description of how to apply the paint.

To make it easier to see the details of the paint job, infantry models are shown much larger than actual size. The figure is also displayed at actual size at the end of each stage, to show you what your miniatures will actually look like.

Since vehicles are large enough to see what's going on, they will usually be shown at approximately 100%, although some details have been shown larger.



PAINT patches of Luftwaffe Camo Green between the brown, again aiming for jagged, angular shapes.

CHEVRON SYSTEM

Each painting step has a symbol indicating its relative level of difficulty, complexity or how time-consuming it is. Use these as a guide to whether a suggested technique is appropriate to your level of painting confidence, or how much time you have.

▲ A good but basic gaming standard. These steps will not assume you have any paints beyond the Utility and your national paint set.

▲ Intermediate techniques for people who want a higher quality gaming standard.

▲ An advanced finish that other gamers will envy.

▲ For truly dedicated painters only.

LIGHT AND SHADE

All modellers know that miniatures are not just toys! And this means we want to paint them to look as realistic as possible. At first glance, you might think this means we want our miniatures to look like men and tanks that have been shrunk to a tiny size. But a better way to think about it is to imagine looking at the real subjects from several hundred metres away. Obviously not as much detail will be visible, so the models are simplified accordingly. That's a good thing, because most people are not keen to paint eyes on 15mm scale figures (although it certainly can be done!).

The way that light falls on an object differs depending on its size. Light travels in a straight line, so it may seem that size should not affect how an object casts a shadow, merely its shape. But light is scattered and dispersed by the atmosphere, and it is bounced and reflected in different ways by every surface it hits. So in practice, small objects just do not have the same level of contrast in their shading. Imagine how dark it would be in the deep shadows at the back of a large cave, compared to a scale model of the cave 1/100th the size.

This means that we have to paint the appropriate shading, lightening the colours on raised surfaces that reflect the most light and darkening the colours in recesses and underhangs, to create the illusion of a large item viewed from a distance.

Scale distance also has an effect on colour. Because of the way the atmosphere scatters and diffuses light, distant objects appear paler and hazier than near ones. Artists refer to this as 'aerial perspective'.



Over the sorts of scale 'distances' involved with 1/100th scale miniatures, aerial perspective is a small and subtle effect, but a genuine one. For this reason, it is reasonable and realistic for paint colours to be lightened very slightly in tone, in comparison to the true historical colour. Plus, lighter models just tend to look better on the table. This isn't something you need to put a lot of thought into - it has been taken into consideration with the colour choice of some of the Vallejo paints.

In short, highlighting and shading is a vital part of miniature painting. You will see it described by a variety of fancy-sounding names like 'chiaroscuro' and 'modulation'. If all of this sounds a little complex and intimidating, don't worry - the tricks and techniques in this book will make it quicker and easier than you may think to effectively shade your miniatures.



This photograph of a Waffen-SS parka shows how the fall of light and shadow conveys its shape and contours.



A miniature painted without shading does have some natural shadows, but its small size is nevertheless apparent.



The same miniature painted with highlights and shadows has a much greater sense of volume and realism.

Even if all the colours on a miniature are painted neatly, without any shading it will always look like exactly what it is: a toy soldier. If anything, neatness and accuracy are less important than effective shading. If a model is well shaded and highlighted, as long as it gives the right impression of detail, the eye will 'fill in' the rest.

PAINTING TECHNIQUES

Before we launch into the specifics of painting Battlefront models, we'll begin by devoting a few pages to the theory and technique of painting. The only way to develop the fundamentals of painting - brush control, accuracy, the 'feel' of how paint flows on to a surface - is by practising it yourself.

TIP

Before you dip your brush in paint, moisten the bristles in your water jar, then shape them to a sharp point. This will give you more accuracy and control. Some painters develop the habit of using their lips to shape the bristles. If you're one of these, that's your business; we won't try to stop you. However, the crease on the side of your hand below your pinkie finger is also useful for reshaping your brush, and more hygienic.

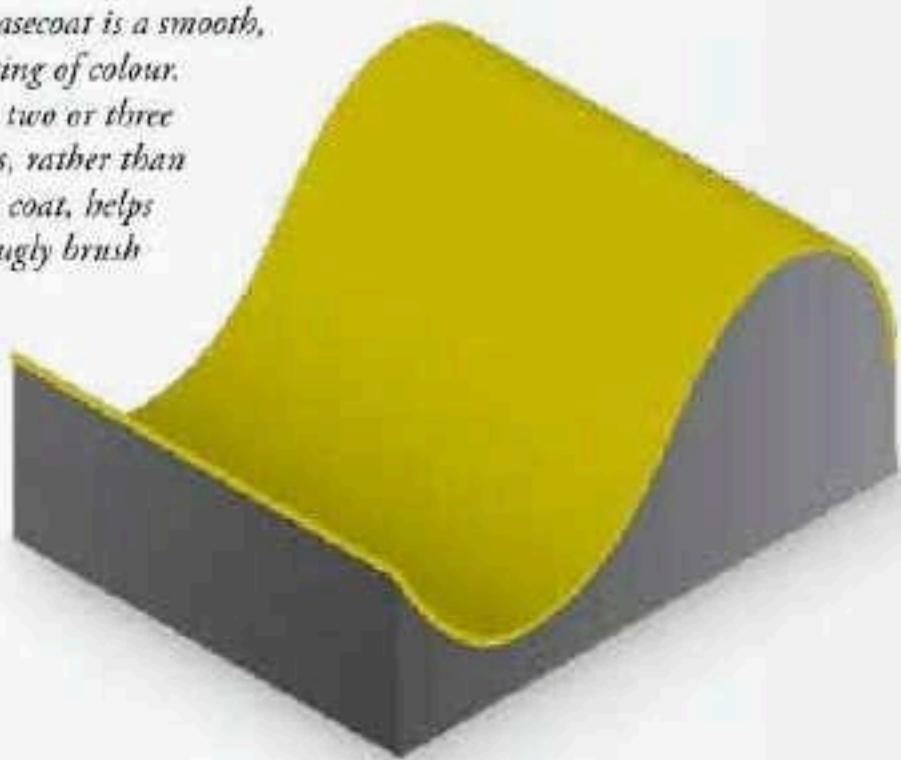
BASECOATING

The basecoat is the first layer of colour. On a vehicle, it will usually be one colour, while on an infantry figure it will consist of an appropriate colour for the uniform, the flesh areas, and each different item of gear. When brushing on a basecoat, be careful not to apply the paint too thickly, or you may risk covering up the details of the model. Vallejo can be used straight out of the bottle, however benefit from a little bit of thinning with a little clean water. You can use them straight from the bottle if you keep your brush moist.

Alternatively, coloured spray primers are a fantastic option, because they are a primer (see page 8) and basecoat in one easy step.

A very common method of painting is to basecoat with a shadow colour – similar to the main colour but darker in tone. The main colour is then painted over this in a solid layer, leaving some of the darker colour showing in recessed areas which would not catch much light. Highlights can also be added, with a lighter version of the main colour painted on to raised detail.

A good basecoat is a smooth, even coating of colour. Applying two or three thin coats, rather than one thick coat, helps to avoid ugly brush strokes.

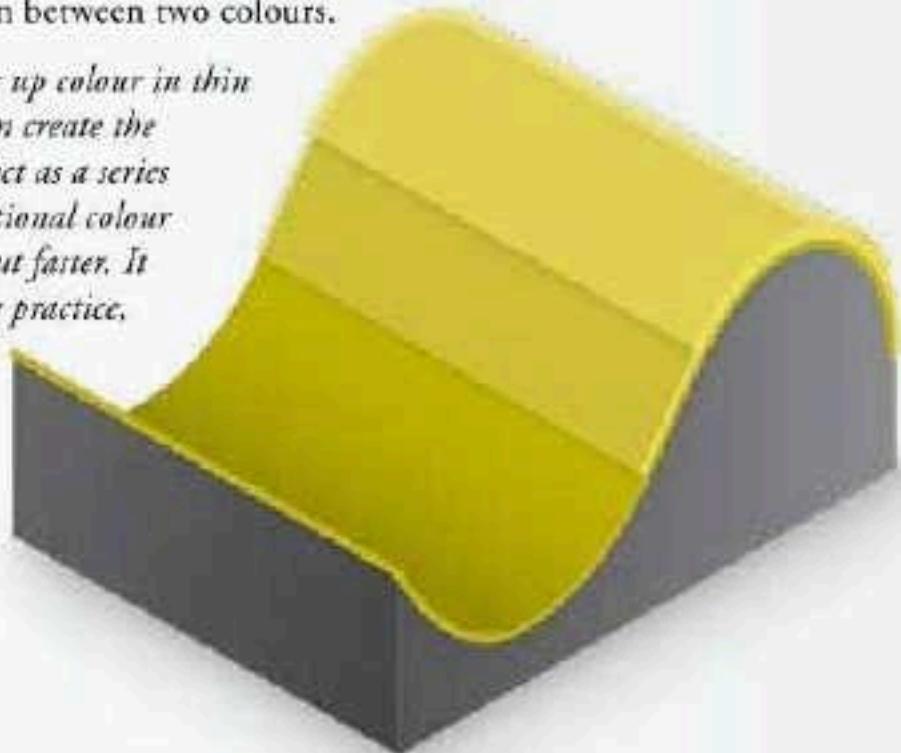


LAYERING

Acrylic paint is very versatile. It can be transparent or opaque, depending on how thickly it is applied. You can learn to use this property to your advantage.

With practice, by controlling the amount of paint on your brush, you can build up colour in several transparent layers, creating a smooth transition between two colours.

Building up colour in thin layers can create the same effect as a series of transitional colour mixes, but faster. It does take practice, though.



A great way to learn to blend effectively using layering is to simply practise on a flat surface, experimenting to see what different marks and effects you can create.



Just a few examples of the totally different tones and effects achievable just with black paint, simply by diluting it to varying degrees with water and by controlling how much paint is 'loaded' on the brush.

WASHES

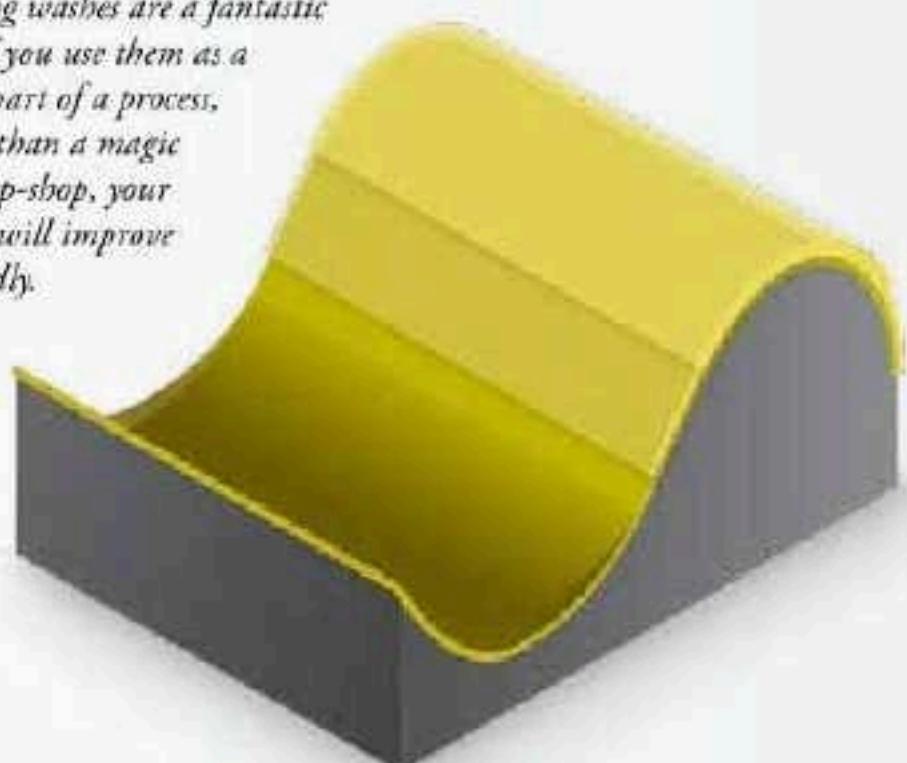
Washes are a quick and easy way of adding shadows and accentuating detail. They are essentially a thin application of colour, liquid enough to let the pigment settle mainly in the recesses, darkening these areas and adding depth.

A wash can be done with regular paint diluted with water, but it will be a little crude and messy. As the water evaporates, the diluted pigment tends to 'creep' out of place, leaving you with a messy tide line of colour. Vallejo shades combine intense pigment with a transparent, highly fluid medium. Their low viscosity causes the pigment to run smoothly into the cracks and recesses and stay there as it dries, giving much better contrast than a simple paint wash.

The Utility set contains two washes, a Black Wash and a Sepia wash. Most of the examples in this book use one of these two colours for shading, however you can substitute them for each-other for different effects - you will not get exactly the pictured colour result, but it will nevertheless produce effective shading. You can also experiment with adding a few drops of paint to your washes to get a variety of different effects.

When using these washes, try to achieve an even coverage over the whole tank. Let the wash pool a little bit in the recesses without building up too much on flat surfaces. If you want a deeper shadow, do a second, targeted wash in the panel lines rather than a single thick coat as the wash may cloud as it dries if applied too thickly.

Shading washes are a fantastic tool. If you use them as a single part of a process, rather than a magic one-stop-shop, your results will improve markedly.



Washes are good, but they are not magic, and they won't always behave exactly how you want them to.

They won't always stay where you want them, and some will pool in areas where you didn't want the colour to be darkened. The larger the area being washed, the more likely this is to be a problem.



While washes on infantry figures are quite forgiving, vehicles, which have plenty of large flat areas, sometimes need tidying up after a wash. Often a careful drybrush of the basecoat colour is enough to tidy up the stray shade. In other cases, you may choose to use your medium brush to strategically layer the basecoat colour over especially messy areas.

GLAZES

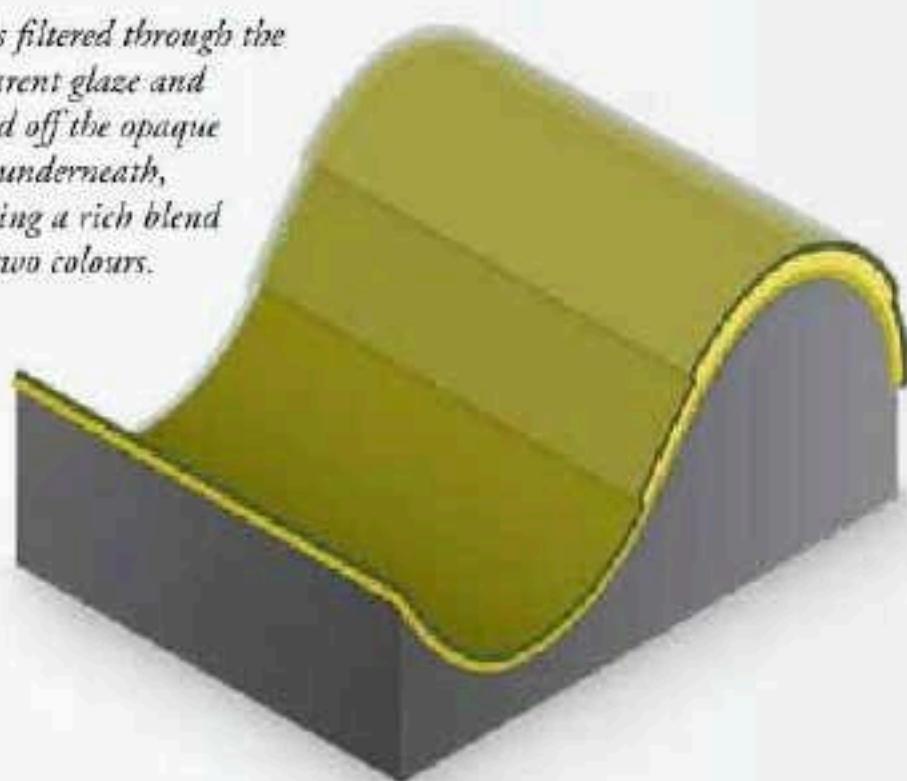
When a transparent wash is used not to add shading but to alter the colour of the underlying paint, it is referred to as glazing. It is done with much less of the wash on the brush, so that a thin layer is spread evenly over a controlled area, rather than pooling in the recesses.

One purpose of a glaze is to intensify the colour of an object. Acrylic paints are fairly well suited to this because of their ability to be translucent. Artists' inks can also be used to dramatically intensify the appearance of colours. Because drab military colours predominate on World War II and World War III models, the opportunities to paint intense colours tend to be fairly rare, however. But when you do get a chance to paint a bright colour - e.g. Soviet flags, air recognition panels, certain tank markings - one or two thin glazes of an appropriate bright colour can really add to the model's impact on the table.

Another purpose of glazes is to smooth out the effect of shading. If you find that your highlights and shadows are too intense, a thin glaze of the main colour is a great way to subtly blend them together.

A glaze of Skin Shade is very useful for adding richness to brown objects like rifles and leather. And the other shades can also be used as glazes, to subtly vary the colour of selected parts of models.

Light is filtered through the transparent glaze and reflected off the opaque colour underneath, producing a rich blend of the two colours.



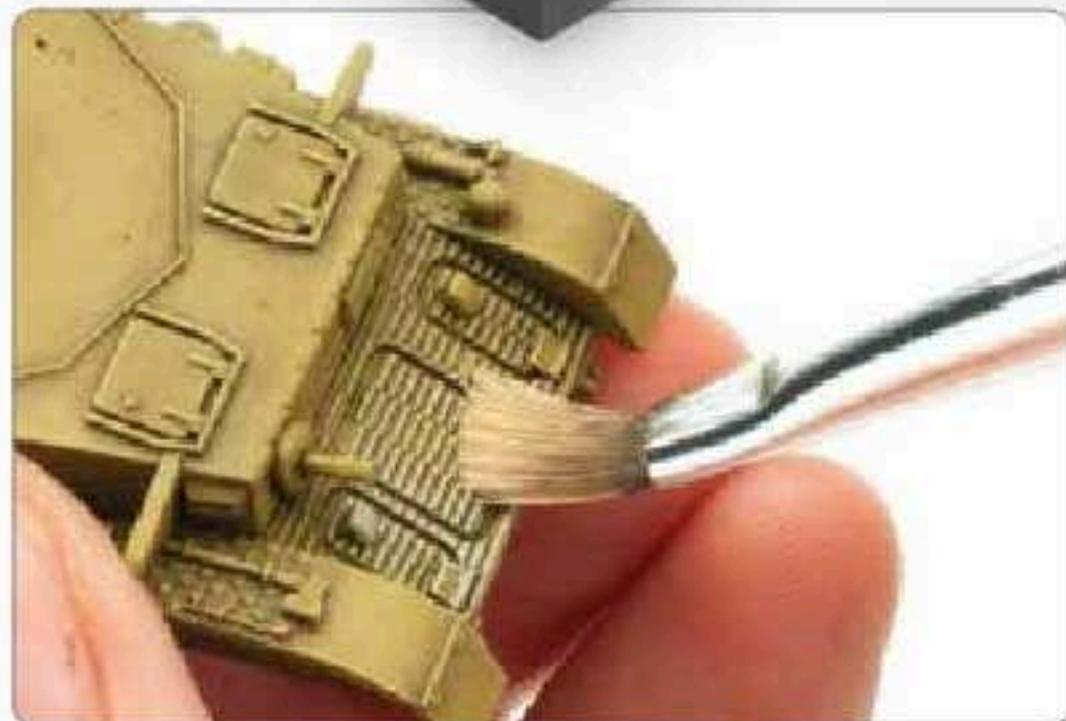
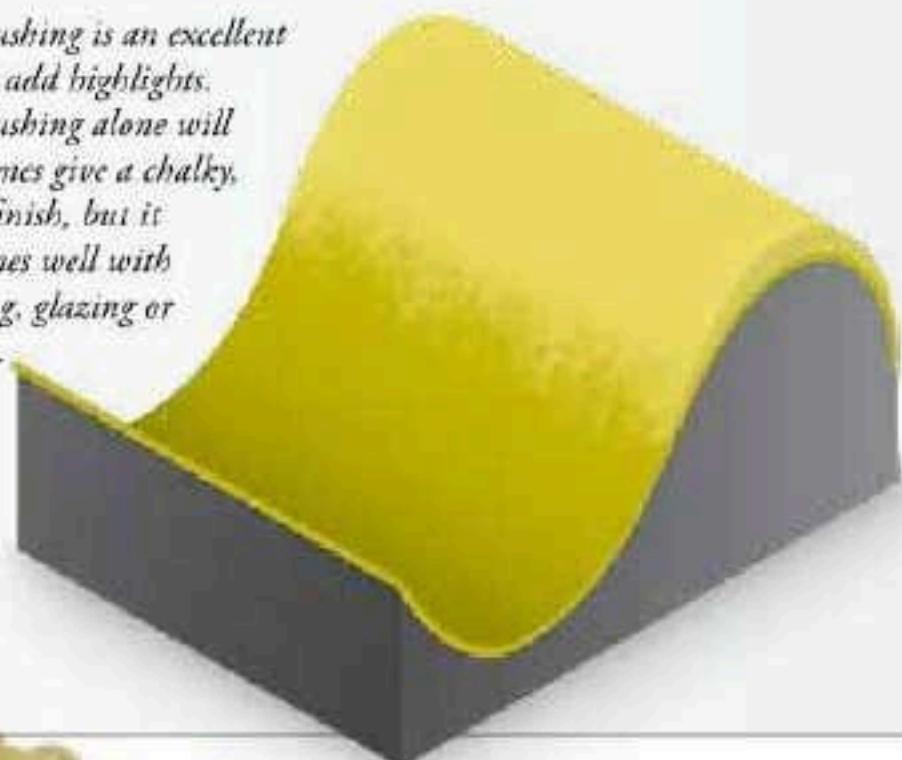
DRYBRUSHING

Drybrushing is a quick and simple technique for selectively adding paint only to prominent parts of a model. It is done by wiping most of the paint off the brush, then dragging the brush back and forth over the surface of the model. Pigment from the paint is deposited on edges and raised parts of textured areas, leaving recesses untouched.

As the name of the technique suggests, the brush should be very dry before you start. If you have recently washed the brush, dry it thoroughly with a rag or paper towel to remove any water from between the bristles before you dip it in the paint. You generally shouldn't thin paint for drybrushing. The thicker and 'stickier' the paint, the easier it is to transfer colour on to the miniature in a controlled way. Vallejo paint has a fairly stiff consistency straight from the bottle, which will work well for drybrushing without thinning.

Drybrushing is tough on brushes! The sticky paint and forceful motion create harsh friction which will quickly bend and weaken the fine, soft bristles of detail brushes. The Drybrush, with its tough bristles, is purpose designed to withstand this friction, making it ideal for most general drybrushing tasks.

Drybrushing is an excellent way to add highlights. Drybrushing alone will sometimes give a chalky, dusty finish, but it combines well with layering, glazing or washes.



For smaller areas, you can use an old, worn-out Medium Brush that no longer has a fine enough point to be useful for detail painting. But try not to use brand new Medium or Fine brushes for drybrushing, unless you want them to be dedicated drybrushing brushes, not really usable for anything else.

As with many techniques, it is easy to learn the basics of drybrushing, but it takes a lot of practice to master the possibilities. A range of variation is possible, from a 'light' drybrush, where almost all paint

is wiped off the brush, and only a very fine, dusty coating of paint is transferred, to a 'heavy' drybrush, almost like normal painting, where most of the paint is left on the brush and is liberally slathered on to a large proportion of the surface.

With experience, you will learn to adjust the amount of paint and the movement of the brush depending on the effect you want to produce.



Some examples of the range of effects possible with drybrushing. These all show black paint drybrushed on to a textured white surface.

Stippling gives a similar but more controlled effect, and works just as well on smooth surfaces.

STIPPLING

A variation of drybrushing, stippling uses essentially the same principle but with a more controlled, deliberate application. Again, some of the paint is wiped off the bristles of the brush - more or less depending on the effect you are trying to achieve.

Instead of dragging the brush laterally over the model, stippling involves dabbing the paint on to the surface using a downward jabbing

motion. Stippling can create areas of colour with softly feathered edges - good for camouflage patterns; or it can give a mottled, uneven coating of colour, ideal for certain weathering effects.

The Drybrush will work well for stippling fairly large areas. If you trim the bristles of an old Medium Brush to a shorter length, it will make a perfect stippling brush for smaller areas.

PUTTING IT INTO PRACTICE

Contrary to the theme of this book, we can't actually tell you how to paint. We can describe techniques and suggest the right colours, but it's up to you to put it all together in a way that is right for you.

Mostly we will show how to paint items individually. Your job is to combine the different steps into a coherent workflow, adapting them as you choose. If you need to wash several parts of the model with the same colour shade, for example, you can save time by doing them all together.

Here's an example of how you might combine techniques from throughout this book to paint a German grenadier from start to finish.

WOOD, LEATHER & CANTEEN
Pages 25-26



BASECOAT the canteen, boots, rifle stock and entrenching tool handle Flat Brown.

UNIFORM & GEAR
Pages 63-69



SHADING WASH
Pages 63, 67



WASH the figure liberally with Black Wash to create shading and definition.

FACE & HANDS
Pages 24



USE BEIGE BROWN to basecoat the face and hands, and to apply a highlight to the boots.

COLOURING WASH
Pages 24



WASH the face and hands, rifle stock, boots and entrenching tool handle with Sepia Wash.

FINISH THE FACE
Page 24



FINISH the face using the Advanced Faces guide. Some painters like to paint skin first and work outwards to avoid getting paint on other items.

UNIFORM HIGHLIGHT
Page 63



HIGHLIGHT uniform with a mix of German Fieldgrey and Stone Grey.

SPLINTER CAMOUFLAGE
Page 67



PAINT the helmet cover and Zeltbahn tent quarter in the 'Splinter' camouflage pattern.

GUN METAL
Page 25



SPARINGLY paint the barrel and other metal parts of the rifle Oily Steel.

PANZERFAUST
Page 55



PAINT the Panzerfaust Dark Yellow, then wash with Sepia Wash in a similar way to German armour.

WAFFENFARBE
Page 64

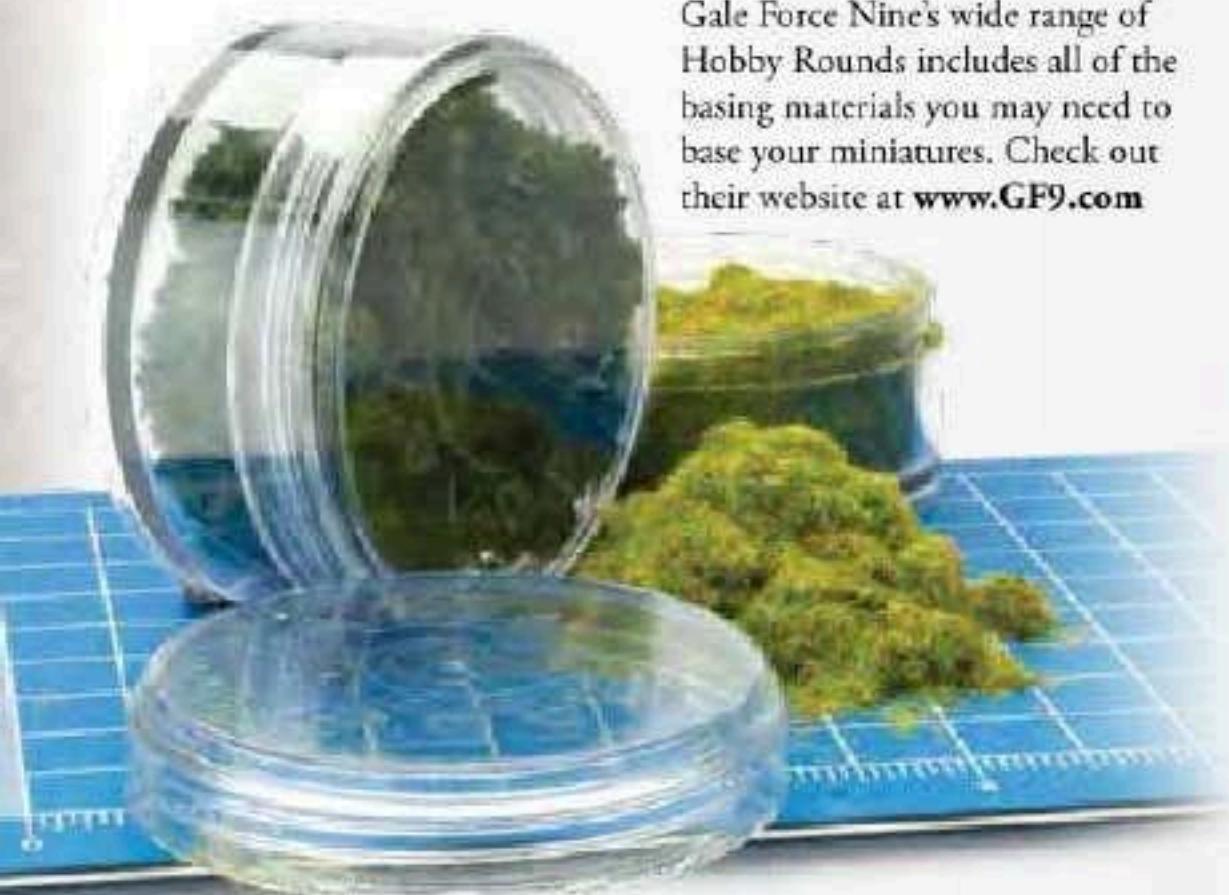


PAINT the Waffenfarbe shoulder-board piping White, the arm-of-service colour for Infantry.

BASING

One of the clichés you often hear about painting a great-looking army is 'bases and faces'. Good faces naturally draw the eye, and can lift the effect of the whole figure. But bases are the largest part of your infantry and gun teams, and can turn them into miniature dioramas. With some thought, research and a little imagination, a well-planned basing scheme can add extra realism and detail to your army.

BASING MATERIALS



Gale Force Nine's wide range of Hobby Rounds includes all of the basing materials you may need to base your miniatures. Check out their website at www.GF9.com



GREEN STATIC GRASS
GFS001



WINTER/DEAD
STATIC GRASS
GFS003



STRAW STATIC GRASS
GFS002



ARID STATIC GRASS
GFS004



MARSH BLEND
GFS005



SUMMER FLOCK BLEND
GFS007



DIRT FOUNDATION
FLOCK BLEND
GFS008



AUTUMN FLOCK BLEND
GFS009



SPRING UNDER-
GROWTH FLOCK BLEND
GFS010



DARK CONIFER
FLOCK BLEND
GFS011



SUMMER 3-COLOR
CLUMP FOLIAGE MIX
GFS013



DARK GREEN STATIC
GRASS
GFS014



AUTUMN 3-COLOR
CLUMP FOLIAGE MIX
GFS015



ASH WASTE FLOCK
GFS016



MEADOW BLEND
FLOCK
GFS017



SUPER FINE
BASING GRIT
GFS018



FINE BASING GRIT
GFS019



MEDIUM BASING GRIT
GFS021



ROCKY BASING GRIT
GFS023



SNOW
GFS027

As well as the commercial basing products, there are lots of things around your house and yard that also make perfect basing materials.

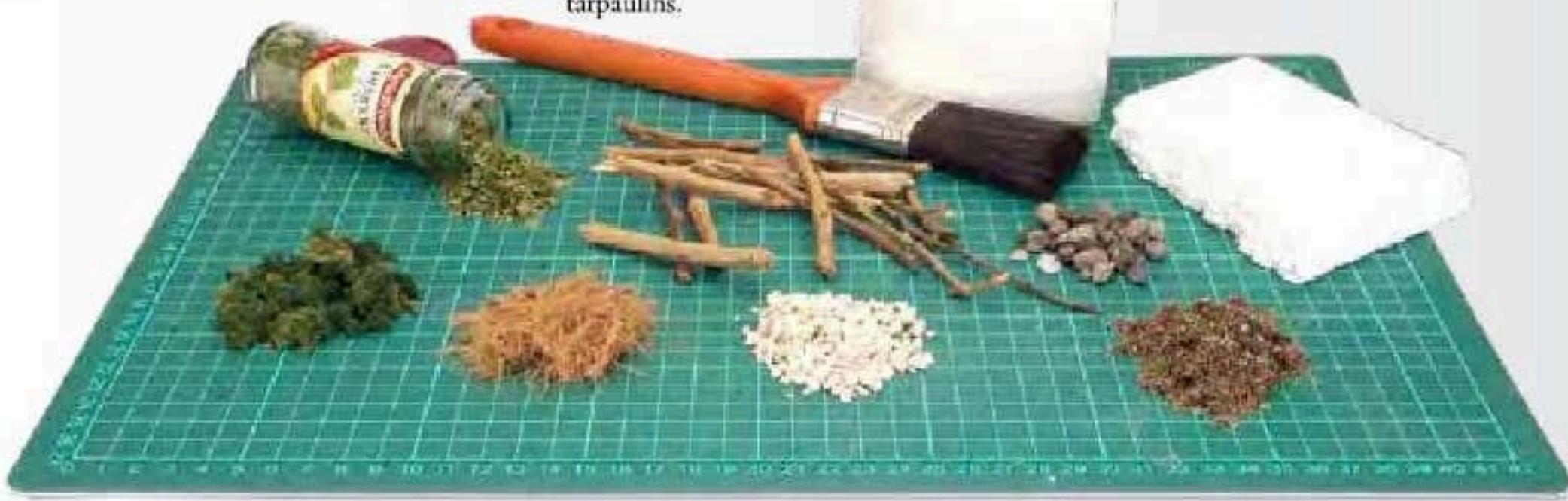
Some of these are:

- Brush bristles for tall grasses and radio aerials.
- Dried tea leaves from the pot for dead leaves, or painted green for live ones.
- Various ingredients from the spice rack for ground cover and decaying foliage.

- Small pebbles or rocks for rocks and boulders.
- Clean kitty litter for rocks and stones.
- Small twigs and sticks for fallen branches and tree stumps.
- Lichen off trees for small bushes.
- Rolled-up tissue paper soaked in PVA white glue for tarpaulins.

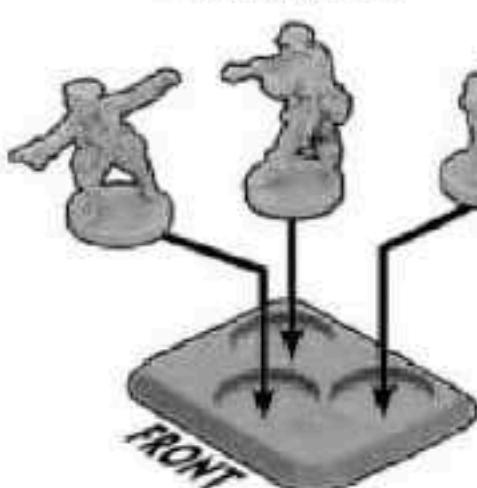
- Match sticks for sawn timber.
- Finely corrugated cardboard for corrugated iron.

As you can see, the possibilities are limited only by your imagination and ingenuity!



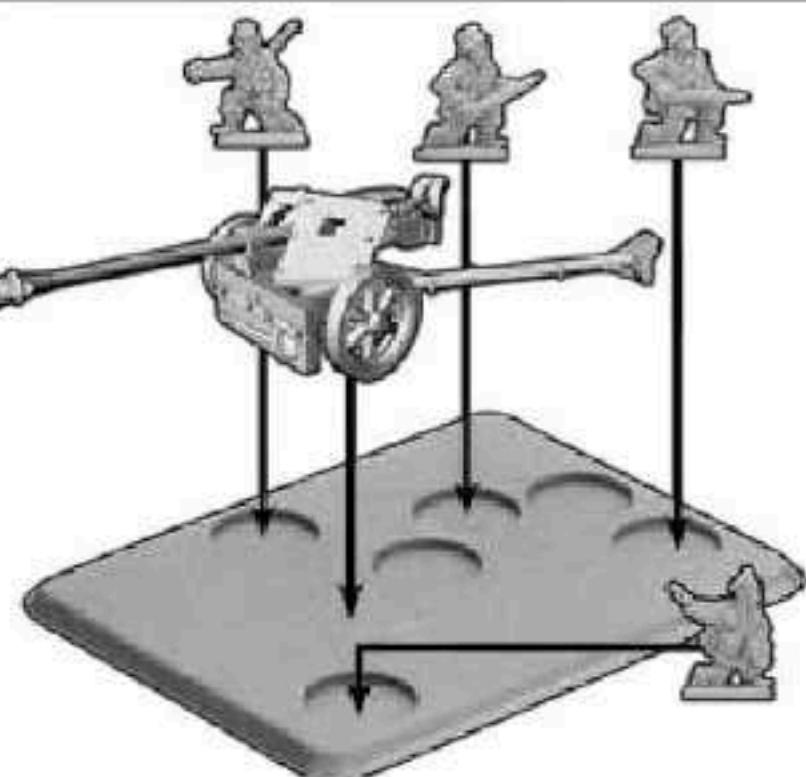
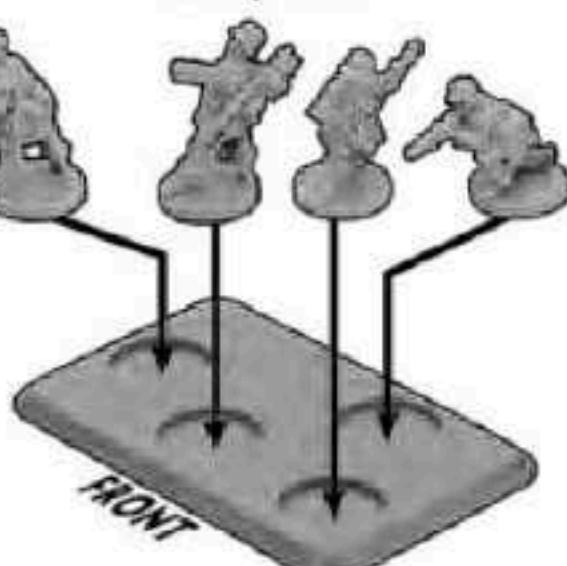
GLUING MINIATURES TO YOUR BASE

Command Team



Use the plugs provided to fill up any spare holes, or fill with ready-mixed filler (see Basic Basing below).

Infantry Team



BASES WITH HOLES: Infantry and guns are formed into teams of 2 to 5 men, and live or die as a team. Base command teams on small bases, infantry teams on medium bases, and gun teams on large bases. Each box or blister comes with the right number of bases to make

the unit. Simply select a base with the same number of holes as figures in the team you are assembling and slot the miniatures in.

All of the miniatures in the plastic range, as well as the newest releases, fit perfectly into bases with holes.

Some older ranges may require some filing to make them fit.

If there are extra holes, or you don't want to fill every hole, simply use a plug or fill it with ready mixed filler in the next step.

BASIC BASING

Here is a simple method for basing your miniatures that gives a good result in a relatively short time. Painting bases doesn't require a good brush. Here we've used old, worn-out brushes that are no longer any good for painting miniatures.



READY-MIXED FILLER: Apply a thin coat of plaster filler to the base to give it a bit of texture. Feel free to sprinkle some grit or sand onto the base for extra texture before the filler dries.



BASECOAT: Paint your base colour. Here we have used German Camo Medium Brown. The paint may soak into the filler resulting in a patchy look, so you may need to paint two coats.



DRYBRUSH: Once you have a good basecoat, drybrush the base with a lighter, contrasting colour. Here we have used Iraqi Sand.



DETAILS: Paint any extra details you've added to your base. Here we've drybrushed the rock London Grey. Again, we are using an old worn-out brush.



FLOCK: Paint some watered-down PVA white glue on to the base, leaving some gaps for the earth to show through, and sprinkle on your choice of Static Grass.

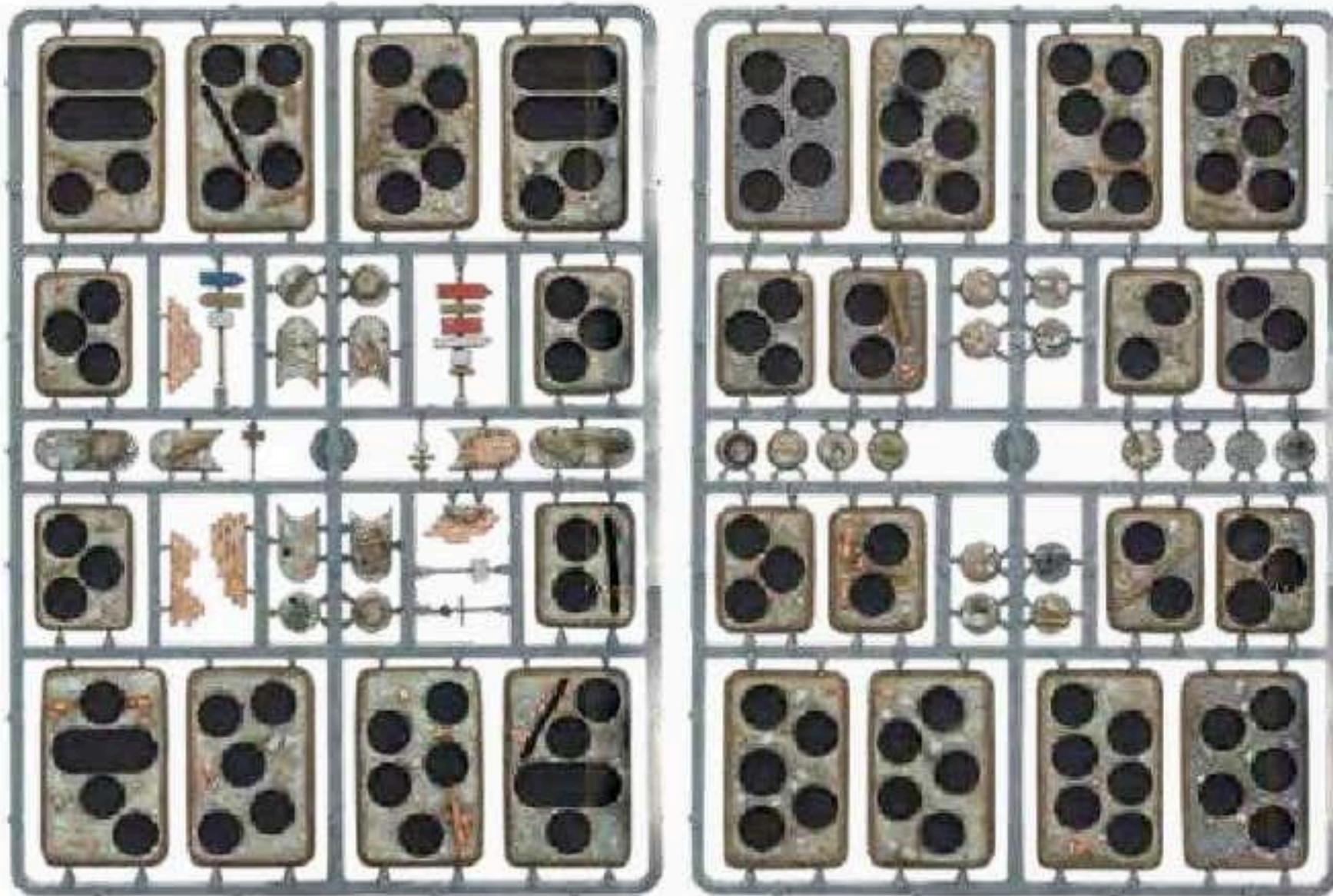


EXTRAS: If you want to take your basing to the next level, experiment with blending different static grass colours and adding pre-made grass tufts.

PLASTIC THEMED BASES

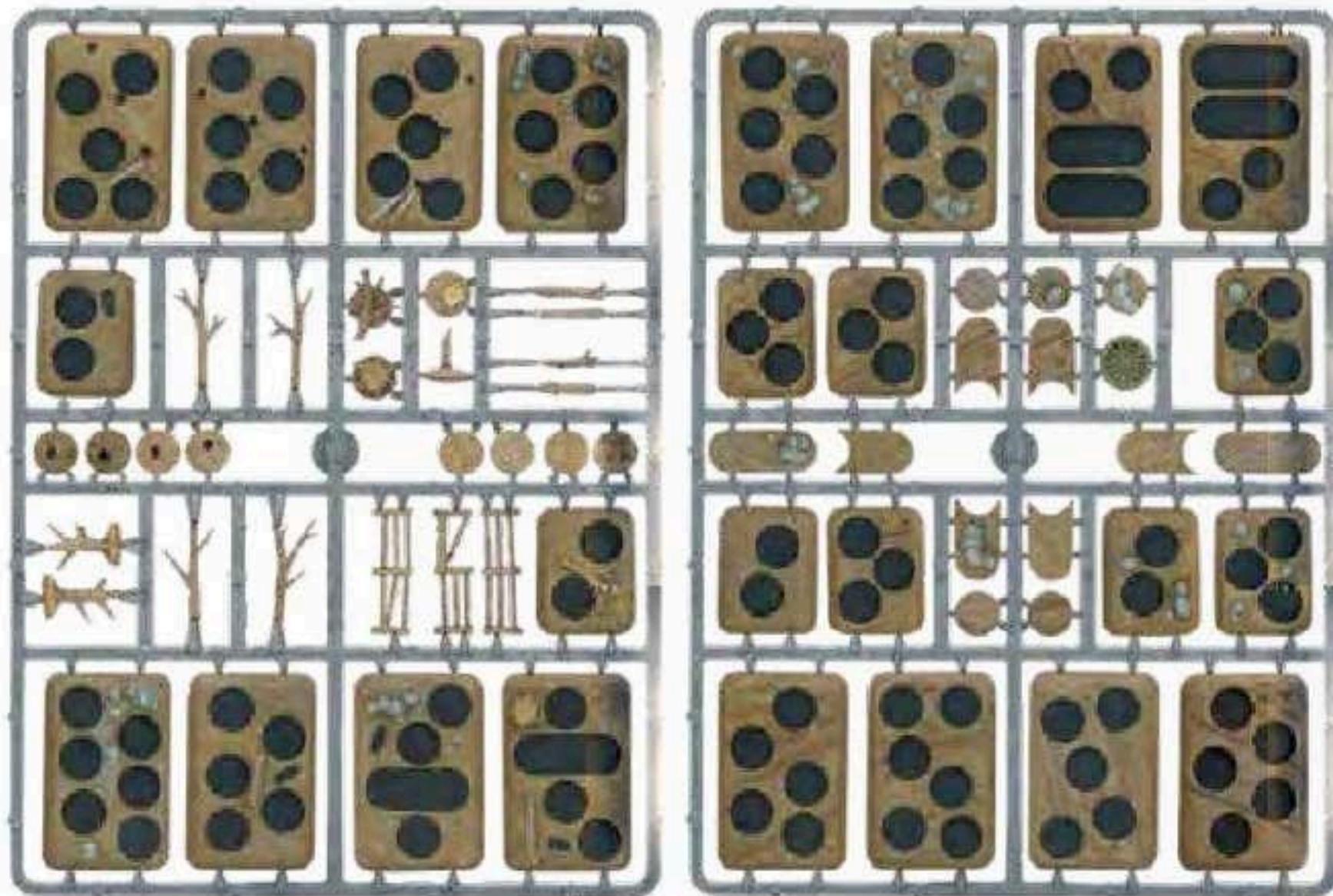
As war raged across the world, infantry fought in theatres from the deserts of Africa to the ruins of Stalingrad. These scenic bases provide a quick and simple way to recreate these battlefields without having to sculpt the detail yourself. Designed to be compatible with the entire *Battlefront* figure range, each base has a number of holes to plug your figures into. Each set has an assortment of themed inserts, giving you limitless basing variations with minimal effort.

RUBBLE BASES



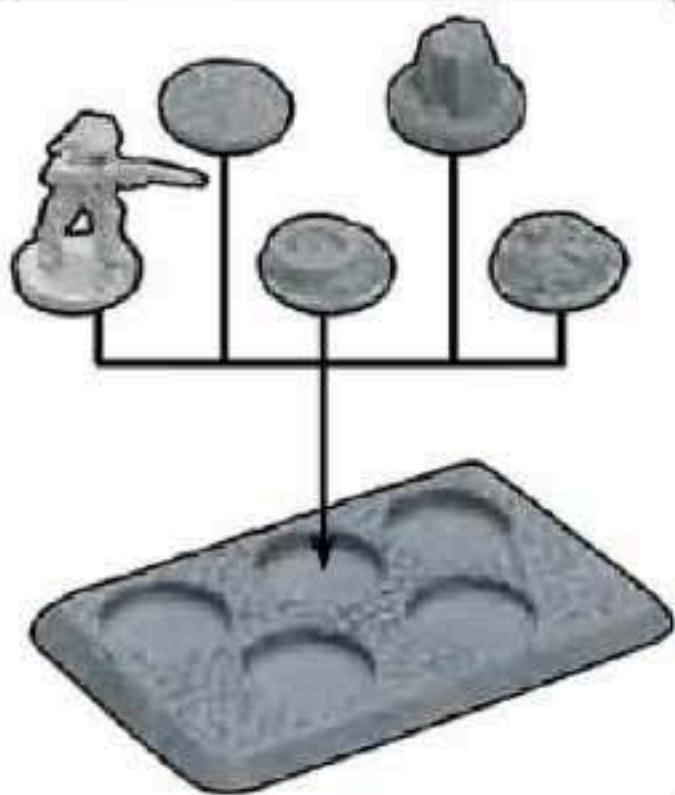
Battlefront's Rubble Bases are designed to depict a generic war-torn urban environment. By varying the colours, they can be used to represent any battleground, from Stalingrad in the East to Caen in the West.

RURAL BASES

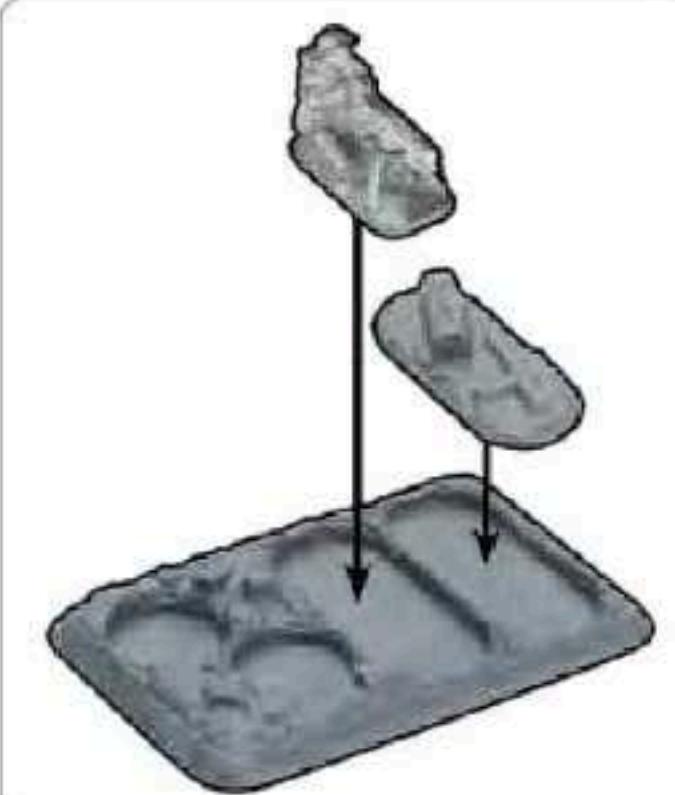


The Rural base set is equally suitable for countryside locales anywhere in Europe, with plenty of fences, trees, dead logs and rocks.

USING PLASTIC THEMED BASES



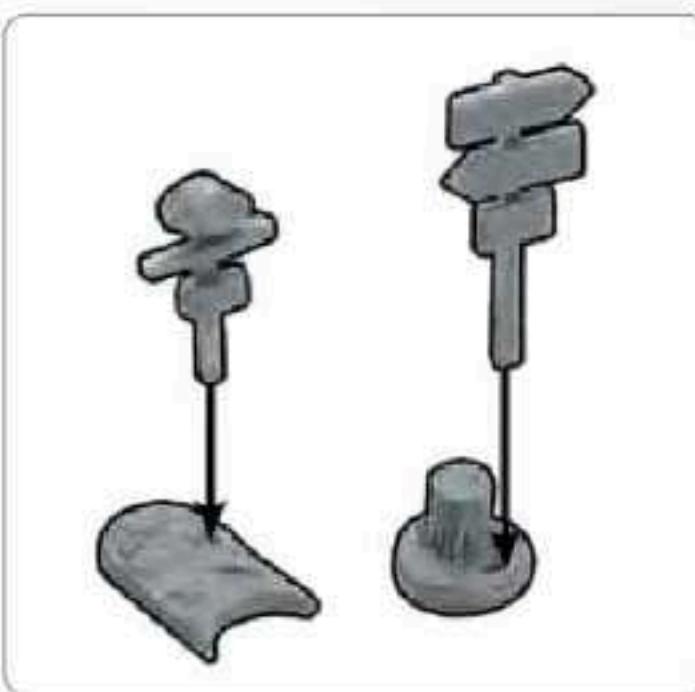
ROUND HOLES: The basic principle of the bases is that the round holes can be filled by either a soldier or a round plug.



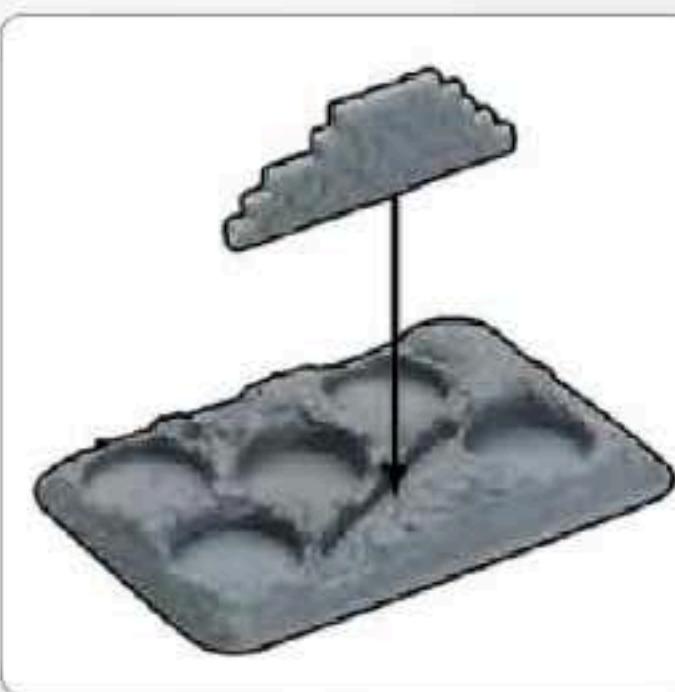
LONG HOLES: Long holes are designed to accommodate oddly shaped figures like HMG teams, or they can be filled with a long plug.



LONG HOLE CONVERTER: For units without HMG teams or prone figures, plugs are included to convert long spaces to round holes.



PLUG EXTRAS: Some of the plugs come with holes to place one of the numerous signposts or grave markers included.



BRICK WALLS: Wall sections fit into the long slots. There are three different shapes of wall, allowing for plenty of variation.



SPECIFIC PIECES: A few of the plugs are intended to fit in specific places. Of course, you can use any plug you like.

PLAN YOUR PLATOON



The most important thing to do first is to plan the layout of your platoon, and work out where everything fits before gluing anything down. You may find it useful to take a photo for reference later on, depending on how you plan to paint your unit. The example above shows a British Rifle Platoon basing plan on the rubble bases.

FILLING PLASTIC THEMED BASES



Fill the cavity roughly halfway with Super Glue.



When you place a figure into the cavity, the excess glue will squeeze out around the edge



For a uniform finish use a toothpick to carefully tease the glue away from the hole's edge and across the figure's base



Sprinkle sand or basing grit into the glue to fill the gap and hide the edge of the figure's moulded-on base



Before the glue sets you can use your toothpick to push the basing grit around.

SUPER GLUE HEALTH AND SAFETY TIP

Cyanoacrylate is an eye irritant, and a lot of people don't realise that this also applies to the fumes, which are a vaporized form of the glue itself. You have probably heard warnings like this before and might not take them very seriously. But this method uses large quantities of glue, so the fumes may be stronger than you are used to. The harsh sting of concentrated fumes in your nose and throat is unpleasant, but the real risk is to the sensitive skin around your eyes. To avoid a potential allergic reaction or dermatitis, try to work in a well ventilated area, perhaps near a fan or an open window.

PAINTING COBBLESTONES

COLOUR PALETTE



OLIVE DRAB
887



LONDON GREY
836



SKY GREY
989

Basing your troops on rubble bases is easier than you think using the Rubble Base set and these quick painting steps.

OLIVE DRAB

Large Drybrush



BASECOAT: Basecoat your base Olive Drab. This will give the appearance of dirt and grime between cobblestones.

LONDON GREY

Large Drybrush



DRYBRUSH: Give the base a heavy drybrush with London Grey.

SKY GREY

Small Drybrush



DRYBRUSH: Give the base a light drybrush with Sky Grey.
DETAIL: Carefully pick out a few random individual stones in London Grey and Sky Grey (and mixes of the two) to create some realistic variation



OTHER DETAILS: Once the cobblestones are finished, paint any other details to finish off the base.

PAINTING BRICKS

COLOUR PALLET

BEIGE BROWN 875
LIGHT BROWN 929
WHITE 951

BASECOAT: Basecoat brick areas with Beige Brown.

DETAIL: Real bricks often vary in colour. Paint individual bricks in varying mixes of Beige Brown and Light Brown to achieve a mottled look.

MORTAR: Heavily dilute White with about three parts water to one part paint. Do a careful targeted wash with a small brush, allowing the paint to run along the cracks.

PAINTING TREES

COLOUR PALLET

GER. CAM. MEDIUM BROWN 826
KHAKI GREY 880
GREEN OCHRE 914
STONE GREY 884

BASECOAT: Begin with a deep brown colour like German Camouflage Medium Brown.

DRYBRUSH: Drybrush with a light, neutral brown such as Khaki Grey.

DETAIL: Emphasise broken ends or areas of peeled bark with Green Ochre.

Trees come in a wide variety of colours and textures, so your imagination is your friend, as are reference photos of real trees. Here are some suggested colours to start you off.

FOLIAGE: If you don't want bare trees, you can use them as a skeleton to attach clump foliage such as Summer 3-Colour Clump Foliage Mix (GFS013), using PVA white glue.

PAINTING FENCES
If you like, you can paint fences using exactly the same method as trees. But we recommend adding a drybrush of a warm neutral grey, such as Stone Grey, to simulate dry old wood, aged and weathered by the elements.

GROUND COVER

The final step is to add some ground cover, such as flock or static grass. Without some sort of greenery, your bases will look very bleak and barren. Paint watered-down PVA white glue wherever you want your ground cover to stick.

Sprinkle or gently press your selected ground cover on to the wet glue. You can use a single colour, or mix and match to get the desired effect. Use a little common sense about where you place your chosen ground cover; it might look a bit odd if you have grass growing out of a rock, or in the middle of a fresh wheel rut.

THEMED BASING - AFRICA

Because basing is such an important part of the 'look' of your force, one way to really impress people is with an interesting or original basing theme. A strong theme is the sort of thing that can see you taking home 'best painted' prizes at tournaments. Once you choose a theme, the first thing you need to do is research. As an example, take a simple desert theme. A little research quickly reveals it is not as straightforward as you might think. Below are some different interpretations.

The cliché of all desert terrain consisting of uninterrupted rolling sand dunes is not exactly true. It varies from area to area. The Western Desert, which included Libya and Egypt, is a dry, craggy environment criss-crossed by steep depressions and wadis (dry riverbeds). Whereas much of southern Tunisia is made up of traditional sandy hills, but with its own distinctive vegetation.

SANDY DESERT EXAMPLE



ROCKY DESERT EXAMPLE



For the warm, yellow sands of Tunisia, basecoat with a 50/50 mix of German Camo Orange Ochre and Tan Earth, followed by a heavy drybrush of Green Ochre, and a final highlight of Buff.

Basecoat the rocks and the face of the wadi with Olive Drab, and the sand with English Uniform. Drybrush the sand with Khaki Grey and Green Ochre, and the rocks and wadi with Iraqi Sand.



Sparingly add some tall, dry grass, some GF9 Spring Undergrowth and GF9 Straw static grass. The trick is to add enough to enhance the base without taking it over.

SOME POSSIBLE DESERT COLOUR PALETTES



Two or three successive layers of drybrushing are usually enough to capture the colour of most types of terrain. It's just a matter of finding the right combination of colours. It is a great idea to make several practice bases to make sure you are happy with the final result before you begin basing your miniatures. This will ensure a consistent look across your whole army.

SEASONAL BASING

Once you have decided where your force is fighting, it is also important to think about *when* it's fighting! Small changes in colour and materials can allude not only to different locales, but also to different times of year. Below are some suggested palettes for various seasons, to spark your imagination and creativity.

SUMMER



CHOCOLATE BROWN
872



GREEN BROWN
879



GREEN STATIC GRASS
GFS001



SUMMER 3-COLOR
CLUMP FOLIAGE MIX
GFS013



AUTUMN



GERMAN CAMO
MEDIUM BROWN
826



GREEN OCHRE
914



WINTER/DEAD
STATIC GRASS
GFS003



AUTUMN
FLOCK BLEND
GFS009



WINTER



LONDON GREY
836



SKY GREY
989



WHITE
951



SNOW
GFS027



THAW/EARLY SPRING



ENGLISH UNIFORM
921



KHAKI
988



SNOW
GFS027



ARID STATIC GRASS
GFS004



COMMON FEATURES

Every army is different, with its own unique uniforms, camouflage schemes and equipment. These will be covered in the national painting guides later in the book. But some things are universal, regardless of nation or theatre, and apply equally to World War II and World War III miniatures. Rather than repeating these common items in each national section, we've compiled them here in one place, where you can refer back to them when you need them, whichever force you have chosen to paint.

Although there is no 'correct' way to paint anything, we have narrowed it down to a single suggestion for each item. An exception is faces; two methods are presented for you to choose from, depending on how much time you want to spend on your army.

Again, these are suggestions, so feel free to experiment and develop your own colour choices and techniques.

BASIC FACES

COLOUR PALETTE

FLAT FLESH 955

BLACK WASH 201

FLAT FLESH Medium Brush

BASECOAT the face and hands with Flat Flesh, in two thin coats.

BLACK WASH Medium Brush

WASH liberally with Black Wash to create shading and definition.

FLAT FLESH Fine Brush

HIGHLIGHT raised details such as fingers, cheeks and nose with Flat Flesh.

ACTUAL SIZE

ADVANCED FACES

COLOUR PALETTE

BEIGE BROWN 875

SEPIA WASH 200

FLAT FLESH 955

LUFTWAFFE UNIFORM 816

BEIGE BROWN Medium Brush

BASECOAT the skin and hands with Beige Brown, in two thin coats.

SEPIA WASH Medium Brush

WASH liberally with Sepia Wash to create shading and definition, or you could use Black Wash instead.

BEIGE BROWN Fine Brush

TIDY UP and re-establish the base colour, leaving shadows in the recesses.

50% BEIGE BROWN
50% FLAT FLESH Fine Brush

HIGHLIGHT raised areas with a mix of Beige Brown and Flat Flesh.

75% FLAT FLESH
25% LUFTWAFFE UNIFORM Fine Brush

GLAZE the lower half of the face to create the appearance of five-o'clock shadow.

FLAT FLESH Fine Brush

HIGHLIGHT only the most prominent details, like fingertips and the tip of the nose, with Flat Flesh.

ACTUAL SIZE

INFANTRY WEAPONS

COLOUR PALETTE



GERMAN GREY
995



OILY STEEL
865



CHOCOLATE BROWN
872



BEIGE BROWN
875



LIGHT BROWN
929

Rifles and other 'small arms' are generally made from a combination of wood and 'blued' steel, which is so dark it can appear almost completely black. So you can leave metal parts black if you prefer. But a suitably dark metallic colour tends to help weapons stand out better on the table.

If you are unsure which parts of a weapon to paint as metal (right) and which to paint as wood (below) an internet image search for that particular weapon is a quick way to find out.

GERMAN GREY

Medium Brush



BASECOAT barrels and other metal parts sparingly with German Grey.

OILY STEEL

Fine Brush



HIGHLIGHT only the most prominent details with a touch of Oily Steel.

CHOCOLATE BROWN

Medium Brush



BASECOAT stocks and other wooden areas with Chocolate Brown.

BEIGE BROWN

Medium Brush



WASH with Beige Brown to add shading and to mimic the rich tones of varnished wood.

50% BEIGE BROWN 50% LIGHT BROWN

Fine Brush



HIGHLIGHT upper edges. If you enjoy painting very fine lines, you can even add a suggestion of wood grain.

WEBBING AND CANVAS

COLOUR PALETTE*



OLIVE DRAB*
887



KHAKI*
988



STONE GREY*
884

THESE COLOURS ARE FOR THE AMERICAN EXAMPLE PICTURED.

FOR NATION-SPECIFIC COLOURS REFER TO THE RELEVANT PAINTING GUIDE.

Every army equips its soldiers with some form of webbing equipment - belts, packs and pouches designed to carry vital personal gear.

Although a chore, extra care must be taken to make it stand out, especially when the webbing colour is similar to the main uniform.

OLIVE DRAB

Medium Brush



BASECOAT in a dark shadow colour to provide contrast against the basic uniform colour.

KHAKI

Medium Brush



BLOCK PAINT the appropriate webbing colour, taking extra care to be neat with narrow areas like straps.

STONE GREY

Fine Brush



HIGHLIGHT edges and raised areas in a lighter colour. This will provide extra contrast and definition.



BRITISH webbing was coloured with a cleaning paste called Blanco. Light green was the standard colour.



GERMAN gear was carried on a belt and Y-shaped harness made of leather, usually in black.



SOVIET webbing was fairly minimal and mostly made from plain canvas, which could vary in colour.

HELMETS

COLOUR PALETTE



*THESE COLOURS ARE FOR THE AMERICAN EXAMPLE PICTURED.

FOR NATION-SPECIFIC COLOURS, REFER TO THE RELEVANT PAINTING GUIDE.

Wargaming with 15mm figures, you will spend a lot of time looking down at them from a high angle. So one part of the miniature that you will always notice is the helmet. Therefore, like the 'bases and faces' rule, even if you rush your way through most of the paint job, it is worth getting the helmets right. Although they are often quite plain, functional items, take the time to ensure that helmets are at least neatly painted and highlighted.

OLIVE DRAB

Medium Brush



50% OLIVE DRAB

50% KHAKI

Medium Brush



BASECOAT the helmet carefully, using two thin coats if necessary, to ensure a neat, even coverage.

HIGHLIGHT with a lighter colour, by lightly drybrushing and/or carefully painting any raised edges.



As you can see, when viewed from a typical 'tabletop' perspective, helmets and other headwear stand out prominently. No matter what the army, they are one of the more important items to paint decently.

CANTEENS (BRITISH AND GERMAN)

COLOUR PALETTE



British and most German canteens were covered in light brown woollen felt.

GER. CAM. MEDIUM BROWN

Medium Brush



BASECOAT with German Camouflage Medium Brown.

US FIELD DRAB

Fine Brush



HIGHLIGHT most of the canteen with US Field Drab, leaving shaded edges.



PAINT any securing straps the same as other webbing equipment.

BROWN LEATHER

COLOUR PALETTE



CHOCOLATE BROWN

Medium Brush



BASECOAT with Chocolate Brown. You can substitute German Camo Black Brown for a darker finish.

FLAT BROWN

Fine Brush



OPTIONALLY apply a fine highlight on raised areas with Flat Brown to give greater definition.

BEIGE BROWN

Medium Brush



HIGHLIGHT with Beige Brown for a warmer, rich natural leather.

TANK TRACKS

COLOUR PALETTE



BEIGE BROWN
875



BLACK WASH
201



OILY STEEL
865



BASECOAT the tracks with Beige Brown to represent dirt on and between the track links.



WASH with 1-2 coats of Black Wash.



DRYBRUSH with Oily Steel.

The high-grade steel of tank tracks is quite impervious to corrosion, and any rust that did form would quickly be worn off by the movement of the tracks. However, dirt and grime would quickly build up in the tread pattern and on areas which weren't being rubbed clean by contact with the ground surface, road wheels or other track links.



Some heavy tanks have solid metal road wheels. You may find it easier to paint these tracks along with the rest of the tank. Consider adding a little chipping with Oily Steel.



It is often easier to paint tracks with rubber road wheels separately, as you can just leave the tyres black, rather than carefully picking them out individually.

TYRES & PAINTING BLACK

COLOUR PALETTE



BLACK
950



BLACK GREY
862



DARK SAND
847

If you want to mix your own greys to highlight black, a useful tip is to ignore what you learned at school about black and white making grey. Adding white tends to make black look chalky and washed out. Instead try adding small amounts of a warm neutral such as Khaki, or a pinkish colour like Dark Sand. Grey tends to darken slightly as it dries. This can make it difficult to judge exactly how the finished model will look, so be patient and don't rush.



Genuinely black fabrics are quite rare, so highlighting uniforms with grey is quite acceptable.



For glossy surfaces, including black leather, any highlights should be bright but very small. Consider finishing with a coat of gloss varnish instead.



BASECOAT tyres with black. Note that the tracks on US half-tracks are a continuous solid rubber strip.



HIGHLIGHT tyres, road wheels, and the rubber tracks with Black Grey.



A TARGETED WASH with Dark Sand in the tread of tyres and tracks can simulate a build-up of dust everywhere that does not contact the road surface.

Black is an easy colour to paint - it covers other colours easily, and if you use a black undercoat it's merely a matter of leaving black items black. But black is a challenge to highlight without making the object instead look dark grey.

RUST

COLOUR PALETTE



SADDLE BROWN
Medium Brush



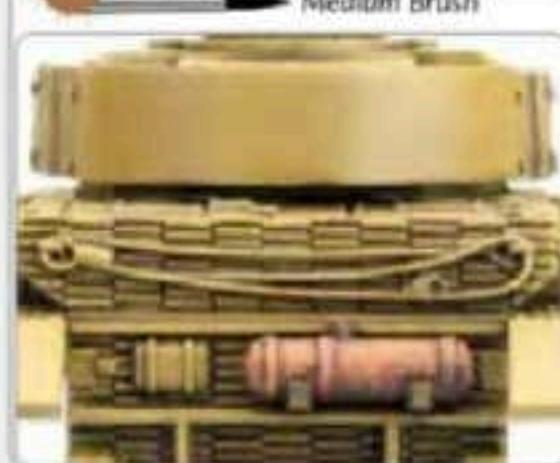
BASECOAT the exhaust with *Saddle brown*.

BLACK WASH
Medium Brush



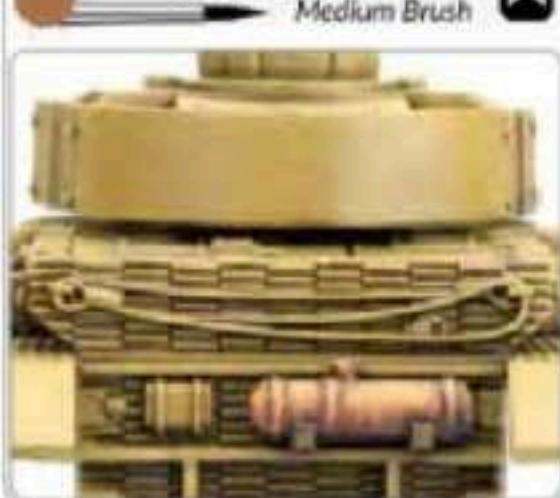
WASH with *Black Wash*. You can substitute watered-down *Black* if necessary.

50% SADDLE BROWN
50% LIGHT BROWN
Medium Brush



STIPPLE a mix of *Saddle brown* and *Light brown*, creating a rough, mottled covering of colour.

LIGHT BROWN
Medium Brush



STIPPLE a little *Light brown* carefully on to raised edges and upper surfaces.



You may like to add touches of the tank colour to the exhaust to show remaining traces of paint.

The high temperatures of tank engines caused the exhausts to quickly oxidise and bake off the paint. Perhaps there is a tendency for modellers to exaggerate this effect a little, but as long as it looks good, who cares?

TOOLS

COLOUR PALETTE



GER. CAM. MEDIUM BROWN
Medium Brush



BASECOAT wooden handles and tools with *German Camouflage Medium Brown*.

SEPIA WASH
Medium Brush



WASH with a little *Sepia Wash* to create shading and intensify the brown tone.

KHAKI

Fine Brush



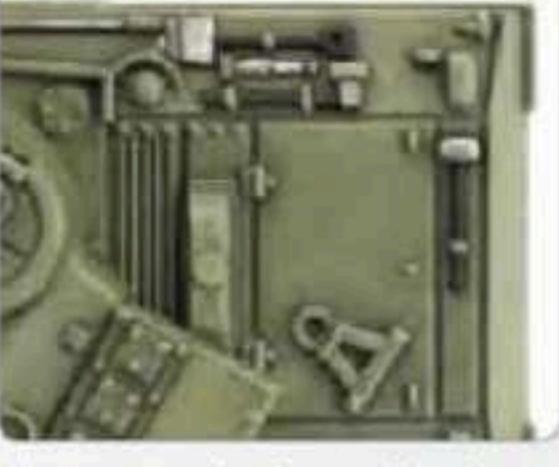
HIGHLIGHT with fine lines of *Khaki* to create the appearance of rugged, well-used tools.

OILY STEEL
Medium Brush



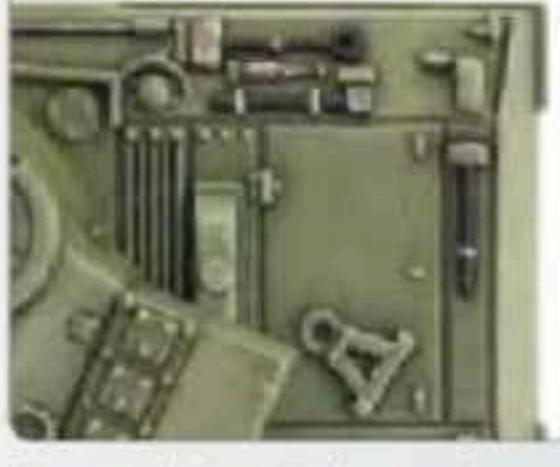
BASECOAT metal tools and tool heads with *Oily Steel*.

75% OILY STEEL
25% WHITE
Medium Brush



HIGHLIGHT with a few small touches of a mix of *Oily Steel* and *White* to increase definition.

SEPIA WASH
Medium Brush



GLAZE with *Sepia Wash* to give the tools a used, greasy appearance.

Tools were sometimes painted with the vehicle itself, so you can leave them 'painted' if you like.

HEADLIGHTS

COLOUR PALETTE



There is no one right way to paint headlights or spotlights on vehicles. It depends on how much time and effort you want to spend. Here are a few suggestions.



BASECOAT the light with Black Grey.



SOFTLY BLEND Light Grey on to the lower half of the light, using a layering technique (see page 12).



BLEND a small amount of Off White over the Light Grey, only in the lower third of the light.



PAINT a small dot of White near the top to simulate reflected light.



A MUCH EASIER METHOD is to simply paint the light Black. You may choose to add a coat of gloss varnish.



OR USE WHITE, leaving a thin Black outline. Again, a coat of gloss varnish will help the light look suitably glassy.

COMMON VEHICLE STOWAGE

Many *Flames Of War* vehicle kits include stowage options to give you the opportunity to customise your vehicles.

Some complete blister packs of extra stowage are available on the *Flames Of War* website.

If you want to try your hand at sculpting, you can use modelling putty to create your own custom stowage like a couple of the examples shown here (see page 66 for more about German Zeltbahn shelter quarters).



Canvas tarps come in all shapes and colours. Choose an infantry uniform colour and follow the painting guide.



The custom-sculpted Zeltbahn on the back of this Panther tank was painted in Splinter camouflage (see page 66).



Another custom Zeltbahn, this time painted in both Summer and Autumn Oak leaf camouflage (see page 68).



German 'jerry cans' containing water were painted with a white cross. Cans without the cross are for fuel.



Paint tow cables like any other metal, applying a wash of Bradley Shade to represent the protective grease coating.



Later in the war US tanks displayed large panels of pink or white fabric as air recognition markers.

DECALS



Although a flat paint surface may look smooth, if you looked at it through a microscope you would see that it appears as rough as sandpaper. This microscopic roughness can trap a tiny layer of air behind the clear film of a decal, allowing light to reflect behind it and causing an effect called 'silvering'. With silvering the transparent film of the decal becomes visible, ruining the painted-on look you are trying to achieve.

You can prevent silvering by painting an area of clear gloss varnish to provide a truly smooth surface for the decal to adhere to.



PAINT a coat of gloss varnish in places you intend to place a decal.



SOAK the decal in water. It should only take about 30 seconds to free itself from the decal sheet.



PRIME the gloss surface with some decal softener and float the decal on to the surface of the tank and use the brush to tease the decal into place. Decal softener makes the decal pliable, so be gentle or you may tear the decal.



REMOVE any excess moisture with a dry brush. Once the decal is dry, apply more decal softener if the decal lies over a textured surface such as Zimmerit. This will let you use a stiff brush to conform the decal to the deeper recesses.



LIGHTLY DRYBRUSH the base tank colour over the decal to tone down the intensity of the colour and help it appear more like it has really been painted on to the surface of the vehicle.



WASH the decal with some Black Wash or watered down Black paint if it is over a textured area. This is especially effective on engine decks or anywhere the marking would get particularly dirty.

WEATHER EFFECTS

As the name suggests, weathering comprises the effects of weather and the environment on the vehicles and equipment in your miniature army. Any soldier or military vehicle will quite quickly take on a dirty, worn appearance. Vehicles accumulate dust, mud, rust and oil stains. At larger scales, military modellers take weathering almost for granted. But for many wargamers, it is often easily forgotten.

Not everyone is a fan of weathering—some prefer their models to have a pristine 'factory fresh' look—but weathering puts the model in context, and adds drama to the subject. It can make otherwise unremarkable models appear just a little more interesting and real.

Just like with basing, make sure you have a clear idea in mind of where and when your army is supposed to be fighting, and let that guide your choice of weather effects. Like many other areas of painting, research will help a great deal.



LIGHT DUST: A very light drybrush of Iraqi Sand over the whole vehicle gives it a dusty appearance. It is also a great way to give a final highlight, emphasising edges and detail.



HEAVY DUST: A heavier drybrush (or light airbrush) of Iraqi Sand around the lower portion of large tanks gives the impression of a very dry, dusty environment.



THICK MUD: Mixing brown paint with pre-mixed plaster filler into a slushy paste is a good way to create convincing thick mud. Once it is dry, drybrush it with a lighter shade.



SNOW: paint wheels, tracks or the lower surfaces of vehicles with a little watered-down PVA white glue, then sprinkle on snow flock. Add gloss varnish to make it look wet.



MUD SPLASHES: Paint directional streaks of Green Brown or Iraqi Sand above and behind wheels or tracks to show that the vehicle has been driving through deep, liquid mud.



MUD SPLATTERS: For very dirty vehicles you can use an old toothbrush to spatter paint on to the model by bending back the bristles with your thumb and letting them flick back.

VARNISHING

To finish your vehicle, you should give it a coat of matt (non-glossy) varnish. Not only will this help your careful paint job survive the hazards of gaming, it will also make the model look better by removing any unsightly sheen where, for example, you have added decals.



BEFORE varnishing, this tank has an unappealing reflective sheen. Note how the gloss finish also makes dark colours appear slightly darker.



AFTER a coat of matt varnish, the tank has a flat, shiny-free finish, the decal appears part of the surface and the Sherman Drab base colour has lost that exaggerated darkness.

WORLD WAR II



Flames Of War allows you to re-fight the key battles of the Second World War. Can you turn the tide of the war in your favour? Can you lead Rommel's Afrika Korps to victory at El Alamein? Can your green American soldiers defeat Rommel's veterans at Kasserine Pass? With Flames Of War you find out.

Flames Of War combines the joys of painting and modelling your own miniature army with the challenge of facing off against your opponent across a gaming table in a social setting, and you'll get to recreate history as it might have been!



FLAMES OF WAR MINIATURES

Collecting a *Flames Of War* army may seem daunting before you begin, but you will quickly discover how much fun it is. In fact, many find that they cannot stop at just one army or force, and usually end up with two, three or more forces at various stages of completion. Some people require patience and motivation to see an army through to the end. And many painters find themselves easily distracted by new miniatures for completely different forces all the time. But that is half the fun!

PLAN YOUR FORCE

There are two ways to go about collecting a *Flames Of War* army: by looking through Intelligence Briefing books such as *Ghost Panzers*, *Fighting First* or *D-Day: Germans* and finding a list that you think is cool, or by simply collecting the models that you like and then finding an Intelligence Briefing they fit into.

The most important thing is to have a clear goal to help inspire you and give you the motivation to finish your project.

There are a lot of things to consider when thinking about starting a *Flames Of War* army. Check out our website, www.FlamesOfWar.com, for more information on the types of forces you can choose from.

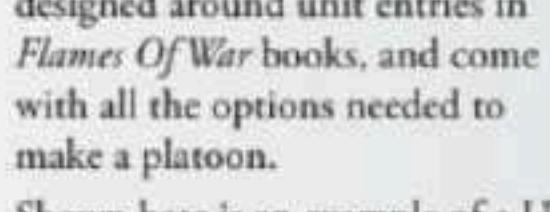
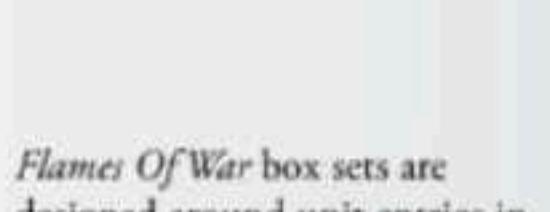


PLATOONS

In *Flames Of War*, the basic unit is a platoon. Each platoon diagram indicates the required teams you must have to make that unit. Each platoon entry in a *Flames Of War* book reflects the historical make-up of the platoon, and tells you how to base the blister or box set that represents that particular unit.



ARMoured R						
	ARMoured RIFLE PLATOON					
6x M1 Garand rifle team						
5x M1 Bazooka team						
2x M1919 LMG						
1x 60mm mortar						
2x M3 half-track						
1x .50 cal MG gunteam						
3x M1 half-track						
1x .30 cal MG gunteam						
1x M1928 BAR team						
15 POINTS						
ARMoured RIFLE PLATOON						
	ARMED RIFLE PLATOON					
ARMOURER	CONFIDENT 4+					
Infantry Ability	3+					
INFANTRY UNIT	INFORMATION					
TRAINED 4+	AGGRESSIVE 3+					
Infantry Ability	3+					
+ INFANTRY UNIT + OBSERVER +						
TACTICAL	TERAIN BASH	CROSS COUNTRY BASH	BROKEN BASH	CRASH		
8'/20cm	8'/20cm	14'/35cm	14'/35cm	AUTO		
WEAPON	RANGE	HOLD	HALT	INHIBIT	ANTI-TANK POWER	NOTES
M1 Garand rifle team	15'/40cm	1	1	2	6	
M1919 LMG team	16'/40cm	5	2	2	6	Assault S., Heavy Weapons
M1 Bazooka team	8'/20cm	1	1	10	5+	Assault S., Close Fighting
60mm mortar	32'/80cm			ARTILLERY	1	4+
						Assault S., Heavy Weapons
12 POINTS						



Flames Of War box sets are designed around unit entries in *Flames Of War* books, and come with all the options needed to make a platoon.

Shown here is an example of a US Armored Rifle Platoon unit card and how it looks in miniature form when made from the corresponding box, UBX75.

NOT SURE WHERE TO START? TRY HIT THE BEACH

Hit The Beach! Contains everything you need to start collecting and playing *Flames Of War*, including:

A German Grenadier Kompanie supported by Panzer IV tanks and PaK40 anti-tank guns.

An American Sherman Tank Company of 75mm & 76mm Sherman tanks supported by US Paratroopers.

A 120 page full colour rulebook, dice, a V1 flying bomb terrain feature, and Unit Cards.

Painting and playing games with *Hit The Beach!* miniatures should help you decide where to go next in the *Flames Of War* hobby, and give you a good base to start from.





AMERICAN

*"All right, they're on our left, they're on our right,
they're in front of us, they're behind us...
they can't get away this time."*

- Lieutenant General Lewis B.'Chesty' Puller

By the time the American forces landed in Italy they were a well-trained army of volunteers, supremely confident in their abilities and supported by a manufacturing powerhouse. With an impressive variety of support options in *Flames Of War*, the American army is very flexible.





US ARMOUR
PAGE 37

INFANTRY WEAPONS
PAGE 25

MARKINGS
PAGES 39-43

DECALS
PAGE 37



TANK TRACKS
PAGE 27

TOOLS
PAGE 28

WEATHER EFFECTS
PAGE 31 & 38

PAINTING BLACK
PAGE 27

US ARMOUR

COLOUR PALETTE



OLIVE DRAB
887



SEPIA WASH
200



GREEN BROWN
879

OLIVE DRAB

Large Brush



BASECOAT with Olive Drab. Two or three thin coats are preferable to one thick coat. Alternatively you can use a Olive Drab spray can for your undercoat.

SEPIA WASH

Large Brush



WASH the vehicle with Sepia Wash. Try to achieve an even coverage over the whole vehicle, letting the wash pool in the recesses without building up on flat surfaces.

OLIVE DRAB

Large Brush



With very few exceptions, all US vehicles were painted the same olive drab colour. You can apply the colours and methods shown here to any US vehicle, as well as most artillery pieces.

50% OLIVE DRAB 50% GREEN BROWN

Small Drybrush



TIDY UP the wash with Olive Drab (see page 14) using a combination of drybrushing and layering, while leaving the recesses dark.

DRYBRUSH the vehicle with a mix of Olive Drab and Green Brown, concentrating on edges, raised details and upper surfaces, to add highlights.



WEATHERING OLIVE DRAB

COLOUR PALETTE



GER. CAM. BLACK BROWN

Large Drybrush



DRYBRUSH Ger. Cam. Black Brown onto your vehicle using the edge of your drybrush, starting at the top of the hull. This helps represent paint wearing down to the metal.

SEPIA WASH

Large Brush



FOR DEEP RECESSES such as the line around hatches, an extra targeted Sepia Wash will intensify the shading. You can also use Black Wash, if you have it.

IRAQI SAND

Large Brush



DRYBRUSH Iraqi Sand on to your vehicle, this time starting at the bottom of the hull, to represent rain-streaked dust.

SEPIA WASH

Large Brush



PAINT Sepia Wash from the fuel cap for fuel stains. After applying a matt varnish (see page 31) you can paint over the top of the stain with gloss varnish to make it look fresh.

The olive drab of US vehicles benefits from adding some weather effects.

It makes vehicles stand out on the battlefield, as well as giving each one some individual character. These weathering tips work well on US vehicles, but can be just as effective on other nations' vehicles as well.

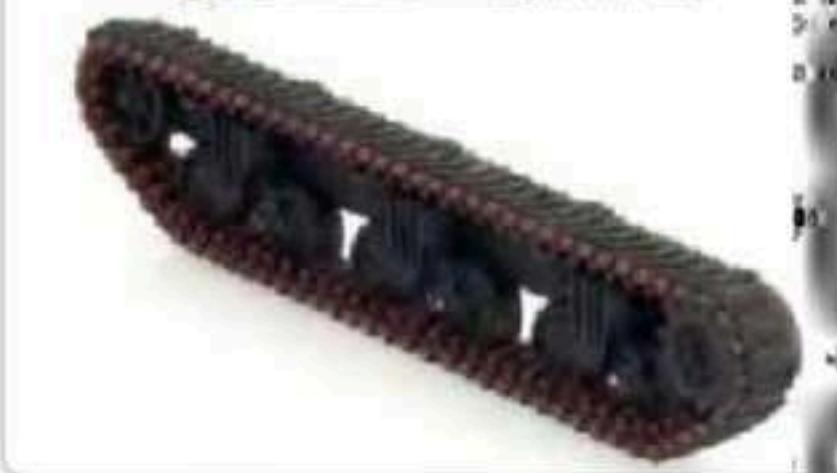
SHERMAN TRACKS

COLOUR PALETTE



CHOCOLATE BROWN

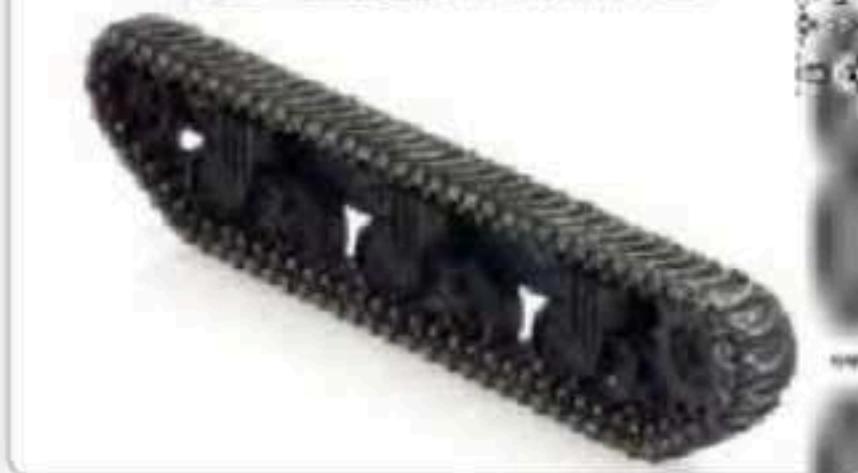
Large Brush



BASECOAT the tracks with Chocolate Brown. Alternatively, use Beige Brown like in the basic Tank Tracks guide on page 29. Carefully avoid the black rubber blocks.

OILY STEEL

Small Drybrush



DRYBRUSH the edges of the tracks and the metal chevrons (on tracks, including these, which have them) with Oily Steel. You can clean up any mistakes up with Black.

SEPIA WASH

Large Brush



WASH the whole track, including the rubber blocks with Sepia Wash.

OILY STEEL

Small Drybrush



PAINT the armour colour, leaving the rubber road wheels black. Give the edge of the track, the chevrons, and the drive sprocket a light drybrush of Oily Steel.

American Sherman tracks—their own and those supplied to the British (as shown in the example) and Soviets—are predominantly solid black rubber held together by steel bolts and pins.

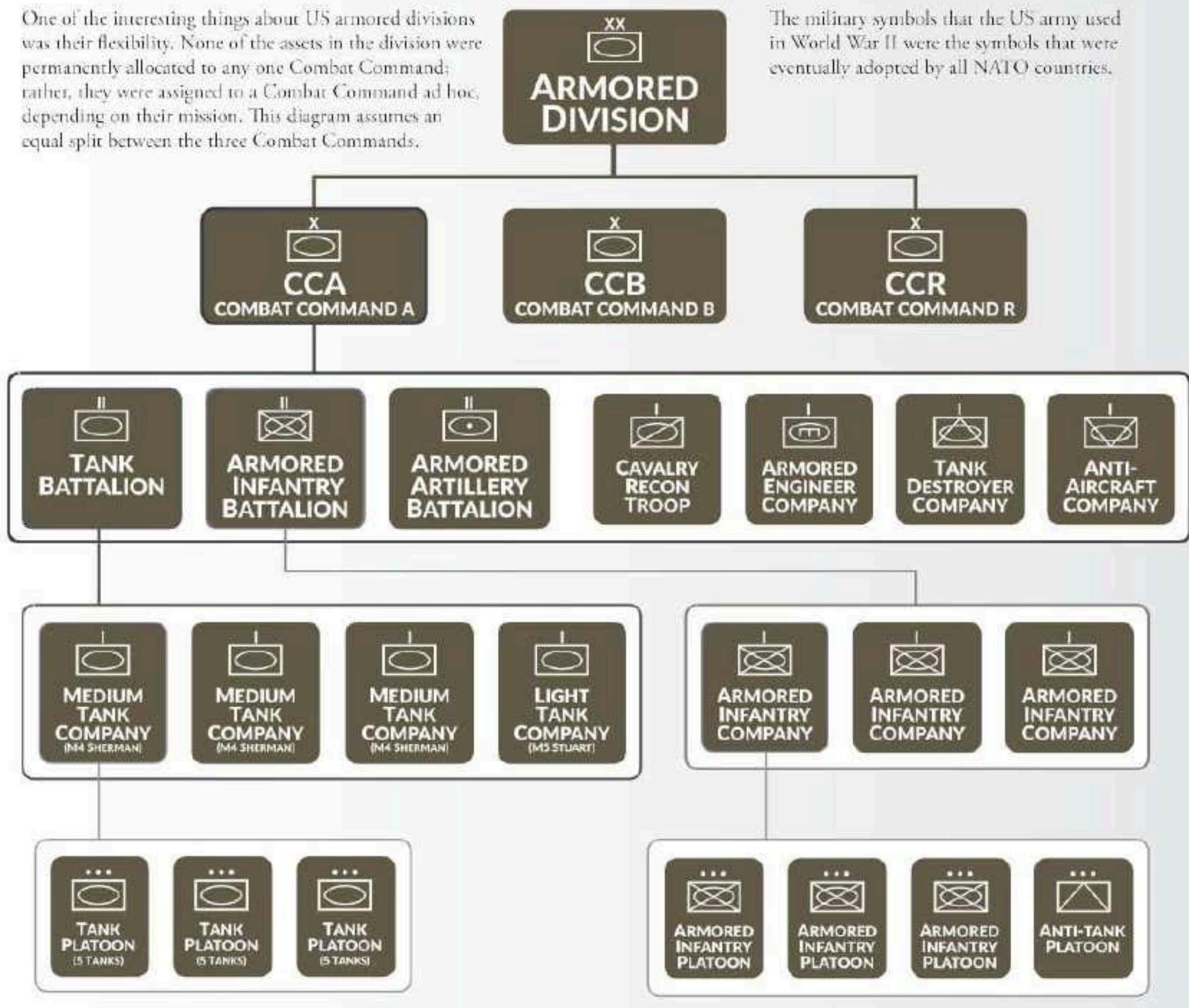
As such, you should approach them differently to all-metal tracks.



US ARMORED DIVISION ORGANISATION

One of the interesting things about US armored divisions was their flexibility. None of the assets in the division were permanently allocated to any one Combat Command; rather, they were assigned to a Combat Command ad hoc, depending on their mission. This diagram assumes an equal split between the three Combat Commands.

The military symbols that the US army used in World War II were the symbols that were eventually adopted by all NATO countries.



THE US UNIT CODE SYSTEM

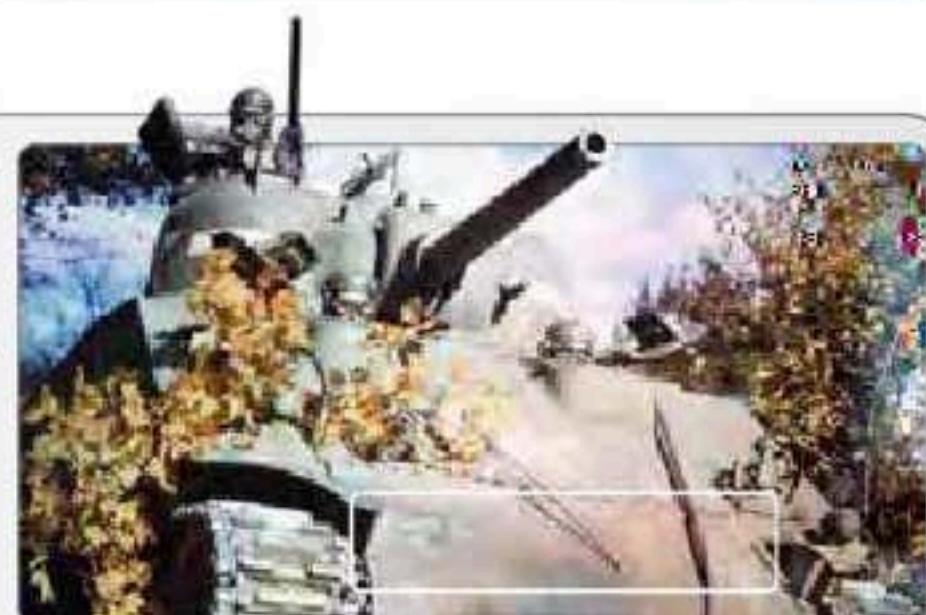
During the course of the war American factories produced over 88,000 tanks, 41,000 half-tracks and over 2,500,000 soft-skinned transports vehicles. It went from a regular army of 250,000 men to a mobilised army of 89 divisions containing over 2 million men.

With so many vehicles in the field they needed a robust vehicle identification

system that was easy to use and interpret by every soldier.

The unit code or bumper marking provided a simple, easy-to-read system that identified every vehicle and where it fitted in the army.

The code had four parts: the formation, the unit, the company, and the individual vehicle number.



FORMATION

The first part is the formation code. This is usually a number followed by a character denoting the type of formation. Examples:

3A – Third Army

4Δ – 4th Armored Div

82A/B – 82nd Airborne

C – Cavalry

UNIT

The second part shows the unit code, usually a regiment or battalion, with a number and letter system like the first group. Examples:

13Δ = 13th Armored Regiment

179I = 179th Infantry Regiment

824TD = 824th TD Battalion

COMPANY

The third group is used for the company within the battalion that the vehicle belongs to. This is usually a single letter.

Headquarters vehicles will usually have 'HQ' as their code.

TANK NUMBER

The final group designates the vehicle number within the company



TANK MARKINGS IN TUNISIA

Division & Regiment Number
Company or Tank Number



Most US units from Fighting First come with a decal sheet including a variety of yellow markings. More decal options, including the white stars which started to replace the yellow ones from late 1942, can be found in the US941 American Decals set.



For the Operation Torch landings, large US flags were painted on the front or sides of half-tracks and some tanks, in hopes that pro-American French defenders would decide not to resist. This proved to be wishful thinking, but flags remained on many vehicles throughout the Tunisian campaign.



The yellow markings were later changed to white, as the yellow was often difficult to see under a covering of dry African dust. At long distances, the star could sometimes be mistaken for a German cross emblem, especially by friendly aircraft. So from the second half of 1943, a circle was added, either solid or broken into five segments.

The two armored regiments of Old Ironsides used a system of geometric symbols to distinguish each company.

1ST ARMORED REGIMENT

1ST BATTALION



HQ Company A Company B Company C Company

2ND BATTALION



HQ Company D Company E Company F Company

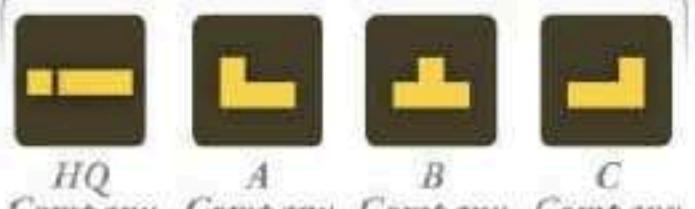
3RD BATTALION



HQ Company G Company H Company I Company

13TH ARMORED REGIMENT

1ST BATTALION



HQ Company A Company B Company C Company

2ND BATTALION



HQ Company D Company E Company F Company

3RD BATTALION



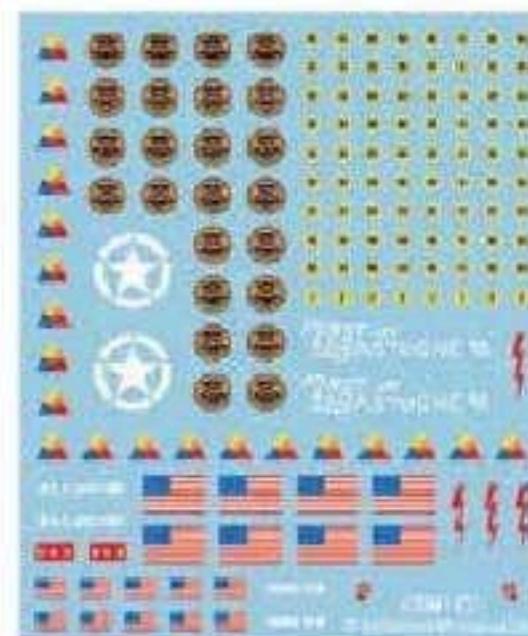
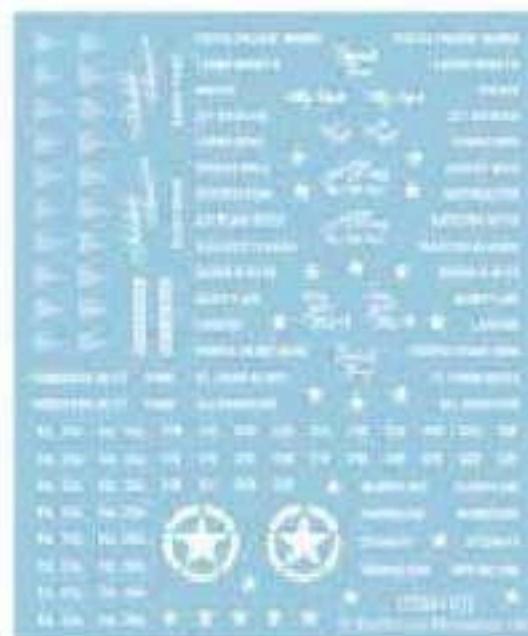
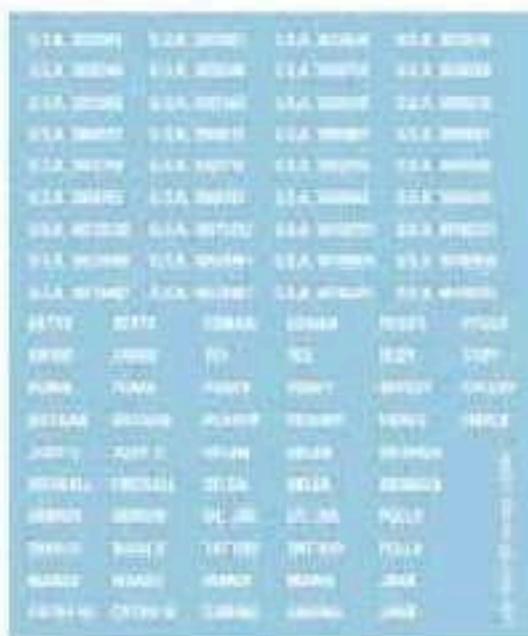
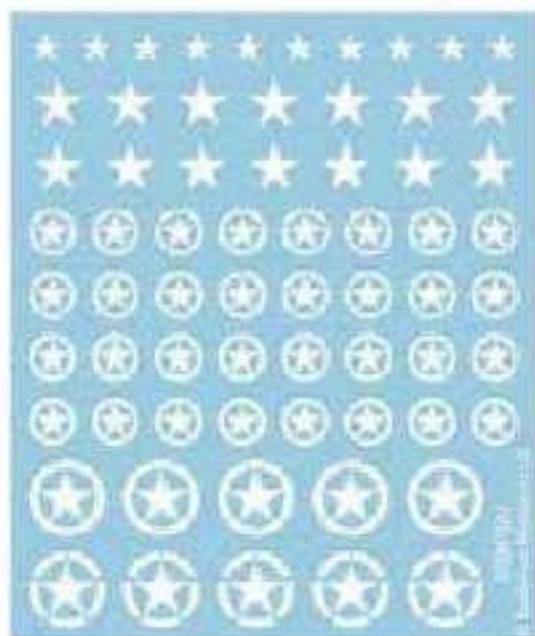
HQ Company G Company H Company I Company



LATE WAR MARKINGS

A GUIDE TO US DECALS

The US941 American Decals sheet was specifically designed to represent the tanks fighting in Lorraine and on to Germany towards the end of WWII. It's a good place to start explaining US vehicle markings and give you some insight and inspiration for decorating your American tanks accurately.



US STARS

The first sheet in the blister gives you all the different types of Allied stars commonly found on US vehicles.

There was no standard way of applying these stars, so feel free to have a mix in your army. The examples below are just a sample of the more common practices in terms of where the stars go, but if you're looking to represent tanks in a specific historical battle, period photos are your friend.

US tanks would typically have six stars: turret sides, hull sides, hull front, and engine deck. These varied in style. Some would have basic stars, while others had stars with rings around them. A large star with a ring was often on the engine deck for air recognition.

Some crew would paint over the stars (and other markings) later so they didn't provide easy targets for the Germans, so leaving some off is an easy way to add variety to your force.



M10 3-inch Tank-destroyer

TANK DESTROYERS: Tank Destroyers usually have the stars in broken circles. Some M18's had a large star on the front armour.



M4A3 Sherman (75mm)



M7 Priest (105mm)

ARMORED ARTILLERY: A similar treatment to the tank destroyer was given to armoured artillery, but they commonly had a large star in a circle on the side armour where there was room.



M4 Sherman (75mm)



M8 (37mm) armoured car

UTILITY/TRANSPORT VEHICLES: There sometimes wasn't room for the regulation-size stars, so smaller stars were often used.



BRIDGE WEIGHTS AND UNIT BUMPER CODES

Vehicles were often marked with their weight in tons on the front of the vehicle. This was shown in black numbers on a yellow circle. The purpose was to easily know the weight of a vehicle for crossing bridges. We've provided a range of numbers to cover most vehicles in your force.

As a guide Sherman tanks usually have bridge weights around 30. Stuarts and other light tanks hover around the mid to high teens. Trucks and utility vehicles use the lowest numbers, while M4A3E2 Jumbos and M26 Pershings are the heaviest tanks in the US army.

A little research will help you find the appropriate weight for each type of vehicle.



M4A3 Sherman (76mm)



M18 Hellcat Tank-destroyer



M20 (.50 cal)

NICKNAMES AND SERIAL NUMBERS



M4A3 Sherman (75mm)

Serial numbers and nicknames adorned most US vehicles. Names on the sheet are simple and are fine to use on any American vehicle, though with some digging you might be able to find which type of tank they historically appeared on. They commonly appeared near the centre of the sides of the vehicles.



M3 half-track

The serial numbers starting with 3 are for tanks. Those starting with 4 are for other tracked vehicles, such as half-tracks. These were usually located at the rear sides of the vehicle.

VEHICLE SPECS



M4A1 Sherman (76mm)

Often vehicles had a small list of technical information near the back of the hull. This listed the weight and dimensions of the vehicle, ground clearance, etc.

US FLAGS



M3 half-track

When the Allies landed in North Africa during Operation Torch in 1942, American crews displayed large US flags on the front and sides of their vehicles. It was hoped that the French defenders (thought to be pro-American) would spot the flags and decide not to offer resistance. This proved to be wishful thinking, as the French did resist most landings. Still, adding the flags to your vehicles is a way to add some colour and patriotism to your force!



OTHER SYMBOLS



M4 Sherman (75mm)



M18 Hellcat

ARMOURED DIVISION SYMBOLS: Some tankers proudly displayed the red, yellow, and blue triangle symbol of the US armoured divisions on the sides of their vehicle.

TANK DESTROYERS: Some M18 crews in Italy painted a large version of their 'Seek, Strike, Destroy' patch on the side of their tanks.

HISTORICAL EXAMPLES

Unlike some other nations in the war, there is a lot of documentation and photos online to use as reference. Our decal sheet was based on a lot of these photos. Below are examples of some historically marked vehicles.



M4A3E2 Jumbo (75mm) 'COBRA KING'



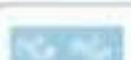
M4 Sherman (75mm) 'CHANNEL BLUES'



M4A3E8 Easy Eight (76mm) 'FLATFOOT FLOOGIE'



M4A3 Sherman (76mm) 'PURPLE HEART KIDS'



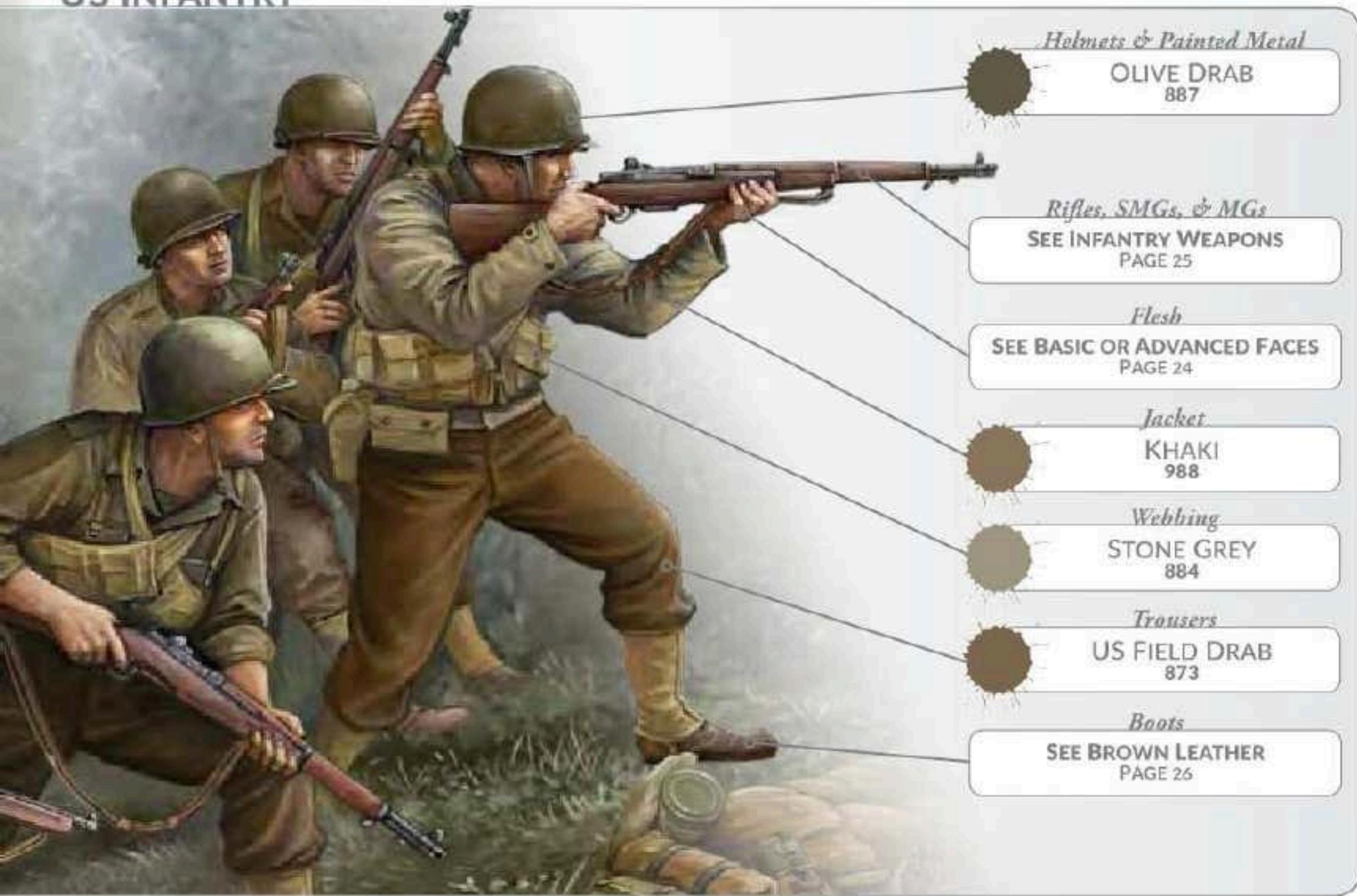
M36 (90mm) GMC 'PORK CHOP'



M12 (155mm) 'ADOLPH'S ASSASSIN'



US INFANTRY



US UNIFORMS

COLOUR PALETTE



KHAKI
988



US FIELD DRAB
873



SEPIA WASH
(490)



STONE GREY
884



US DARK GREEN
893

KHAKI

Large Brush



US FIELD DRAB

Medium Brush



SEPIA WASH

Large Brush



BASECOAT the jacket with Khaki, using two thin coats if necessary to provide an even coverage.

BASECOAT the trousers with US Field Drab. For later in the war you can paint the trousers US Dark Green instead.

WASH the figure liberally with Sepia Wash to add shading in the recesses and folds of the cloth.

KHAKI

Medium Brush



TIDY UP the jacket with Khaki, leaving darker shadows in the recesses.

US FIELD DRAB

Medium Brush



HIGHLIGHT the trousers with fairly broad strokes of US Field Drab, using the layering technique (see page 14).

STONE GREY

Fine Brush



HIGHLIGHT raised details and edges of the jacket with Stone Grey.

The 'olive drab no. 3' colour of the M-1941 jacket is often mistakenly described as 'khaki' because it faded quite quickly with use to a dusty khaki colour.



CAMOUFLAGE UNIFORMS

During the Normandy invasion in June 1944, a camouflage suit was issued to elements of the 2nd and 30th Infantry Divisions, the 17th Engineer Battalion, as well as the 2nd Armored Division's 41st Armored Infantry Regiment.

The uniform was quickly discontinued in early July after GIs were mistaken for camouflaged Germans and fired upon by their own troops, sometimes with tragic results. However, there is photographic evidence of the uniform being worn well into the later stages of summer.

STONE GREY



YELLOW GREEN



FLAT EARTH



Despite only having a short service life, painting an infantry unit in this distinctive camouflage will add some interesting flavour to your force.

Like all infantry camo schemes you can get away with simplifying when painting it at 1:100 scale.



US INFANTRY CAMOUFLAGE

COLOUR PALETTE



KHAKI
988



BLACK WASH
201



STONE GREY
884



YELLOW GREEN
881



FLAT EARTH
983

KHAKI

Large Brush

BLACK WASH

Large Brush

STONE GREY

Medium Brush



BASECOAT the uniform with Khaki, using two thin coats if necessary to provide an even coverage.

WASH with Black Wash to add shading in the recesses and folds of the cloth.

HIGHLIGHT with Stone Greys, using the layering technique (see page 14).

YELLOW GREEN

Fine Brush



PAINT small spots of Yellow Green. You can substitute other light green paint if necessary.

FLAT EARTH

Fine Brush



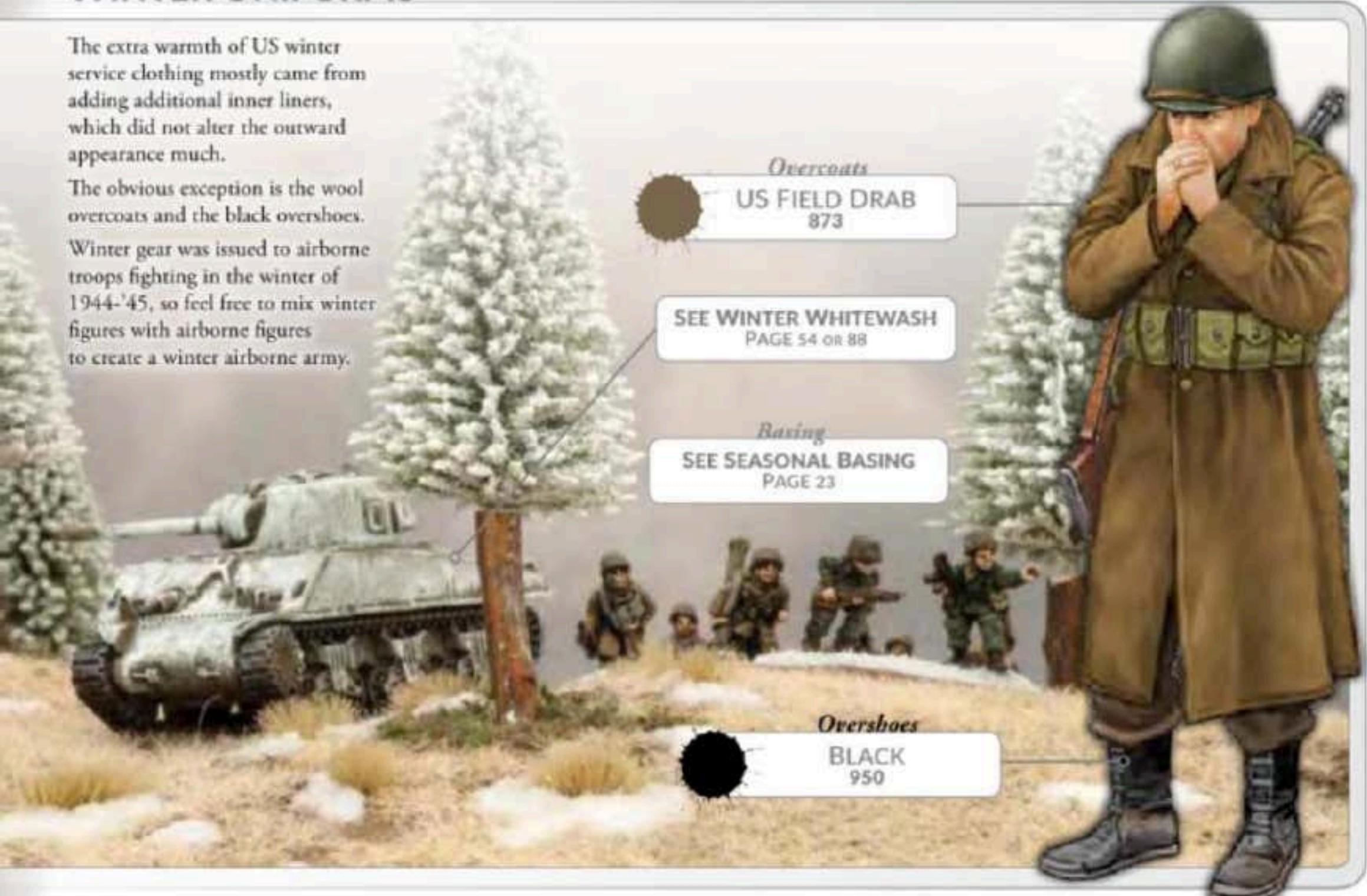
PAINT small spots of Flat Earth. You can substitute Beige Brown if you don't have Flat Earth.



WINTER UNIFORMS

The extra warmth of US winter service clothing mostly came from adding additional inner liners, which did not alter the outward appearance much.

The obvious exception is the wool overcoats and the black overshoes. Winter gear was issued to airborne troops fighting in the winter of 1944-'45, so feel free to mix winter figures with airborne figures to create a winter airborne army.



OVERCOATS

COLOUR PALETTE



GER. CAM. MED. BROWN

Large Brush



BASECOAT the overcoat with German Camo Medium Brown.

OLIVE DRAB

Medium Brush



BASECOAT the webbing equipment with Olive Drab.

SEPIA WASH

Large Brush



WASH the figure liberally with Sepia Wash to add shading in the recesses and folds of the cloth.

US FIELD DRAB

873

STONE GREY

884

Larger uniform items like overcoats have lots of folds and wrinkles, so they are an opportunity to practise your shading and highlighting.

50% GER. CAM. MED. BROWN 50% US FIELD DRAB

Medium Brush



PAINT a mix of German Camo Medium Brown and US Field Drab, leaving darker shadows in the recesses.

US FIELD DRAB

Fine Brush



HIGHLIGHT with broad strokes of US Field Drab, using the layering technique (see page 14).

STONE GREY

Fine Brush



FINISH the webbing equipment with Khaki and Stone Grey (see Webbing Equipment, page 27)



AIRBORNE TROOPS

The first combat uniform issued to US airborne troopers, the M1942, was purpose designed for airborne troops by Major William Yarborough (who was also the designer of the US Airborne parachute wings). The design included features such as pockets cut on the diagonal to allow easy access while wearing webbing equipment and large, expanding, bellows style leg pockets that became a trademark of the wartime US airborne trooper. The M1942 uniform was used only by paratroopers and wasn't issued to glider troops.

The Paratroopers taking part in combat jumps in North Africa, Sicily, Italy and Normandy wore this uniform and even one battalion that jumped during "Market Garden" in Holland was still wearing this uniform. This uniform was made from light cotton that was a pale greenish-tan colour. Due to the vagaries of the manufacturing process the shade could vary greatly.

Being made from lightweight cotton, the knees and elbows tended to wear out quickly so many an airborne trooper bribed his unit parachute rigger to sew patches over the elbows and knees. The material commonly used for this was cotton duck from old parachute packs and was olive drab in colour (Army Green).

After the US airborne forces were withdrawn from Normandy they were refitted and brought back up to strength ready for the next mission. This included the widespread issue of the brand new M1943 olive drab uniform to the veterans of the 82nd and 101st divisions. This wasn't just a paratroop uniform but the beginning of the US Army's push to standardize the combat uniform. All airborne units received the M1943 uniform, even the glider troops, but the paratroopers were quick to modify theirs by adding bigger leg pockets.

The new airborne divisions arriving fresh from the States already wore this new uniform and it was the uniform seen dropping from the sky, or climbing out of a glider, during Market Garden in Holland and Varsity over the Rhine and into Germany proper.



NORMANDY AIRBORNE UNIFORMS

COLOUR PALETTE



OLIVE DRAB

Large Brush



BASECOAT the uniform Olive Drab.

BLACK WASH

Large Brush



WASH liberally with Black Wash to add depth.

OLIVE DRAB

Fine Brush



HIGHLIGHT edges and raised folds of fabric with Olive Drab.

POST-NORMANDY AIRBORNE UNIFORMS

COLOUR PALETTE



US DARK GREEN

Large Brush



BASECOAT the uniform US Dark Green.

BLACK WASH

Large Brush



WASH liberally with Black Wash to add depth.

US DARK GREEN

Fine Brush



HIGHLIGHT with US Dark Green.



GERMANY

"Don't fight a battle if you don't gain anything by winning."

-Fieldmarshall Erwin Rommel

Throughout the war the German forces were typically well-trained and well-motivated troops with excellent equipment. They pioneered new strategies and led the way technically and tactically for most of the war. In *Flames Of War* German armies tend to be small elite forces that are strong on the offensive.





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MARKINGS
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WEATHER EFFECTS
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INFANTRY WEAPONS
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PAINTING BLACK
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RUST
PAGE 28

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PAGE 56

TANK TRACKS
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1939

SEPTEMBER 1:
Germany invades Poland.

SEPTEMBER 3:
Britain, France, Australia
and New Zealand declare war
on Germany.

SEPTEMBER 17:
The Soviet Union invades
Poland.

SEPTEMBER 29:
Germany and the USSR
divide up Poland.

NOVEMBER 8:
Assassination attempt on
Hitler fails.



Panzer 38(t) (3.7cm)

UNDERCOAT	BASE COLOUR	CAMOUFLAGE
SADDLE BROWN 940	GERMAN GREY 995	CHOCOLATE BROWN 872



Panzer III (5cm)

UNDERCOAT	BASE COLOUR
SADDLE BROWN 940	GERMAN GREY 995



Panzer II (2cm)

UNDERCOAT	BASE COLOUR	CAMOUFLAGE
SADDLE BROWN 940	GERMAN GREY 995	DARK SAND* 847



Panzer III (Uparmoured)

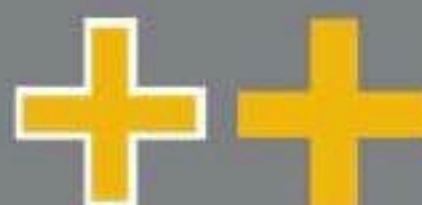
UNDERCOAT	BASE COLOUR
SADDLE BROWN 940	GREEN BROWN 879

The brown on grey camouflage scheme, introduced in 1935, was applied to German tanks fighting in the Low Countries, Poland, and France. The official colours RAL7016 *Anthrazitgrau* (German Grey) and RAL8017 *Dunkelbraun* (Chocolate Brown) were painted in a camouflage pattern of 2/3 grey and 1/3 brown with soft contours between the colours. This was over an undercoat of *Signalbraun* (Saddle Brown).



When Germany invaded Poland in 1939, its armoured vehicles displayed a large white cross (above) as the national emblem, this proved to be an excellent, highly visible, aiming point for Polish anti-tank gunners. German crews quickly tried to partially obscure it by smearing on mud or oil.

In an effort to conserve paint, the RAL8017 *Dunkelbraun* (Chocolate Brown) was dropped and vehicles were painted in RAL7021 *Dunkelgrau* (German Grey) without camouflage. This was based on the official order: HM 1940, no. 864, dated July 31, 1940, after the battles for France and the Low Countries.



After their experiences in Poland, it was then decided to use the yellow paint that was used for unit markings to paint out the centres of the cross, this soon changed to a simpler solid yellow cross.

*The first vehicles to enter the African campaign in 1941 were still in their unsuitable *Dunkelgrau* (German Grey). Crews mixed mud to a paste and applied it over the vehicle as a camouflage coat, carefully avoiding any markings.

1940

APRIL 9:
Germany invades Denmark
and Norway.

MAY 10:
Germany invades France,
Belgium, Luxembourg and
the Netherlands.

JUNE 10:
Italy declares war on France
and Britain.

JULY 10:
Battle of Britain begins.

SEPTEMBER 13:
Italy invades Egypt.

1941

MARCH 12:
The Deutsches Afrikakorps
arrives in North Africa, and
recaptures Cyrenaica.

JUNE 22:
Germany invades the
Soviet Union in Operation
Barbarossa.

AUGUST 20:
Siege of Leningrad begins.

NOVEMBER 18:
British launch Operation
Crusader and recapture
Cyrenaica.

DECEMBER 7:
Japanese attack Pearl
Harbour, US and UK declare
war.



1942

JANUARY 26:
First US troops arrive in Britain.

MAY 26:
Battle of Gazala.

JULY 1-30:
First battle of El Alamein.

SEPTEMBER 13:
The German advance in Russia reaches Stalingrad.

OCTOBER 23:
Second Battle of El Alamein.

NOVEMBER 8:
Operation Torch, a joint US and Great Britain force lands in Africa.

1943

FEBRUARY 2:
German 6th Army surrenders at Stalingrad.

FEBRUARY 8:
Soviets re-take Kursk.

FEBRUARY 14:
Germans defeat US at Kasserine Pass.

MARCH 2:
Germans withdraw from Tunisia, North Africa.

MAY 13:
German and Italian troops in North Africa surrender.

JULY 5:
Germany launches a major offensive at Kursk.

JULY 9/10:
Allies invade Sicily.

JULY 12:
Soviet Union launch a counter-attack at Kharkov.

SEPTEMBER 8:
Italy surrenders to Allies.

SEPTEMBER 9:
Allies land at Salerno in Italy.

SEPTEMBER 11:
Germans occupy Rome.

NOVEMBER 6:
Soviet forces liberate Kiev.



Panzer IV (long 7.5cm)



StuG (short 7.5cm)



Panzer IV (long 7.5cm)



Tiger (8.8cm)



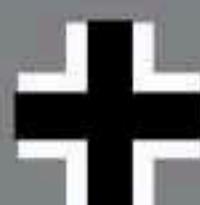
After the initial rush to ship vehicles to Africa, all vehicles were shipped to the Afrikakorps in yellow-brown (Green Brown). Later tanks in the African campaign can be painted with a sandy base colour.



Copying the Luftwaffe marking, the cross was changed to a white outer with the centre of the cross showing through the vehicle colour of Dunkelgrau (D).

The dark camouflage patterns on vehicles contrasted with the snowy landscape, making them easy targets. Crews used a whitewash camouflage. This was applied straight over the paint, being careful not to obscure unit markings.

Some vehicles painted in the early grey scheme, had dark yellow or dark green applied as a camouflage pattern in 1942. Vehicles manufactured after this date were in a factory-applied coat of dark yellow (RAL7028 Dunkelgelb, Dark Yellow).



In 1941, the Afrika Korps started painting in the centres of the cross in black to make them visible again.

This new version of the Balkenkreuz, consisting of a black cross with white edges became the official national symbol in February 1943.

In February 1943 dark yellow (RAL7028 Dunkelgelb, Dark Yellow) became the official base colour for vehicles. Vehicles in the field were to be repainted in accordance with the new order whenever they could.





1944

JANUARY 4:
Battle of Monte Cassino begins.

JANUARY 22:
Allies land at Anzio.

JANUARY 27:
Siege of Leningrad lifted.

FEBRUARY 3:
German forces in the Korsun Pocket surrender.

MAY 12:
Soviet forces liberate Crimea.

JUNE 5:
Allies liberate Rome.

JUNE 6:
D-Day landings in France.

JUNE 22:
The Soviet Union launches Operation Bagration.

JULY 25-30:
Allies breakout of Normandy.

SEPTEMBER 17:
Operation Market Garden.

DECEMBER 16-27:
Battle of the Bulge.

1945

January 12:
Soviets launch an offensive into East Prussia.

January 17:
Germans withdraw from Ardennes.

February 13:
Budapest falls to the Soviet Union.

March 7-24:
Allied forces cross the Rhine.

April 18:
Germans in Ruhir Pocket surrender.

April 21:
Soviet forces reach Berlin.

May 7:
Germany unconditionally surrenders.

May 8:
VE (Victory in Europe) Day

August 6:
First atomic bomb dropped.

August 8:
Soviets declare war on Japan.

August 14:
Japan unconditionally surrenders.



Hetzer (7.5cm)



Panzer IV/70 (long 7.5cm)



Panther (7.5cm)

UNDERCOAT	BASE COLOUR	CAMOUFLAGE 1	CAMOUFLAGE 2
SADDLE BROWN 940	DARK YELLOW 978	CHOCOLATE BROWN 872	REFRACTIVE GREEN 890 OR LUFTWAFFE CAM. GREEN 823

Panther (Late 7.5cm)



UNDERCOAT	CAMOUFLAGE 1	CAMOUFLAGE 2
SADDLE BROWN 940	DARK YELLOW 978	REFLECTIVE GREEN 890

By 1943 the Germans began applying a three-colour camouflage scheme of brown, green and *Dunkelgelb* to their vehicles. There are many different patterns, from hard-edged to soft-edged. The variety of schemes makes it relatively easy to find one you like and apply it to your army.

The ambush three-tone pattern (as seen on the Königstiger in the artwork on page 48) was adopted from August 1944 out of necessity to hide from aircraft during the Normandy campaign. This pattern was intended to help vehicles hide under foliage. These patterns generally had an even coverage of each colour, with intermingled spots.

The disc pattern camouflage (as shown on this Panther G, left) was a variant of the ambush pattern that made an appearance during the Ardennes offensive in late 1944.

All of these schemes use the same primer, base and camouflage colours, to different effect.

Due to a shortage of paint, the camouflage process was simplified in October 1944 by applying a camouflage pattern using *Olivgrün* (Reflective Green) and/or *Dunkelgelb* (Dark Yellow) directly over the dark red primer (Saddle Brown). Some vehicles did not even receive any camouflage at all and went into battle in only their primer.



Panzer IV (7.5cm)

UNDERCOAT	BASE COLOUR	CAMOUFLAGE 1	CAMOUFLAGE 2
SADDLE BROWN 940	REFLECTIVE GREEN 890	DARK YELLOW 978	CHOCOLATE BROWN 872



Panzer III (short 7.5cm)

UNDERCOAT	BASE COLOUR	CAMOUFLAGE 1	CAMOUFLAGE 2
SADDLE BROWN 940	STONE GREY 884	CHOCOLATE BROWN 872	LUFTWAFFE CAM. GREEN 823



Panzer IV (7.5cm)

UNDERCOAT	BASE COLOUR	
SADDLE BROWN 940	DARK YELLOW 978	OR STONE GREY 884

In December 1944, *Olivgrün* (Reflective Green) was introduced as the final official base colour on German vehicles. This was camouflaged as needed with *Dunkelgelb* (Dark Yellow) and *Rotbraun* (Chocolate Brown).

In 1945 the colour of the standard *Dunkelgelb* changed to a more beige colour than its 1944 predecessor, due to pigment shortages. To represent this, you can substitute Stone Grey for Panther Yellow.

In late March 1945 an emergency plan went into effect to mobilise every last self-propelled gun and tank from Germany's tank training schools into makeshift combat units.

Most vehicles from a *Panzer Ausbildung Verbände* (Replacement Tank Force) would have been repainted in plain *Dunkelgelb* when they arrived at the training grounds, and were rushed to the front line without any added camouflage. So they could be painted in either Panther Yellow or the later Stone Grey.



GERMAN GREY ARMOUR

COLOUR PALETTE

GERMAN GREY
995BLACK WASH
201DARK SAND
847

GERMAN GREY

Large Brush



BLACK WASH

Large Brush



BASECOAT your tank with German Grey. Two thin coats are better than one thick coat. For such a light colour, you may find it easier if you use a white or light grey undercoat.

GERMAN GREY

Medium Brush



DARK SAND

Small Drybrush



TIDY UP the wash with German Grey using a combination of drybrushing and layering.

DRYBRUSH the tank with Dark Sand, concentrating on edges, raised details, and upper surfaces to add highlights.

WHITEWASH

COLOUR PALETTE

WHITE
951GERMAN GREY
995BLACK
950

WHITE

Large Brush



GERMAN GREY

Small Brush



PAINT your tank following the first three steps for German Armour above, but use White as your basecoat and a heavily watered down Black as your wash.

GERMAN GREY

Small Brush



PAINT all of the sharp and raised edges of the tank carefully with German Grey. If you want your tanks to have a fresh coat of Whitewash, then you can stop here and just finish up with some decals.



FINISH with decals and some worn areas that expose the grey under the whitewash. Using an old brush and German Grey, push the brush up and away from you on the model so the bristles fan out in random directions to make 'scratches' in the whitewash, especially around hatches.

AFRIKA KORPS ARMOUR

COLOUR PALETTE



GREEN BROWN
879



SEPIA WASH
200



DARK SAND
847

GREEN BROWN

Large Brush



BASECOAT your tank with *Green Brown*. Two thin coats are better than one thick coat. For such a light colour, you may find it easier if you use a white or light grey undercoat.

SEPIA WASH

Large Brush



WASH the tank with *Sepia Wash*. Try to achieve an even coverage over the whole tank, letting the wash pool in the recesses without building up too much on flat surfaces.

GREEN BROWN

Medium Brush



TIDY UP the wash with *Green Brown* using a combination of drybrushing and layering.

DARK SAND

Small Drybrush



DRYBRUSH the tank with *Dark Sand*, concentrating on edges, raised details, and upper surfaces to add highlights.

Like Dunkelgelb, there is a lot of debate about the 'correct' DAK paint colour. See the German Armour Timeline for more info.

Remember that Pale colours like Dark Sand can be challenging to paint over a dark base without getting ugly brush strokes. Consider using a white or pale grey primer to make it easier to get a bright, even finish.

DUNKELGELB ARMOUR

COLOUR PALETTE



DARK YELLOW
978



SEPIA WASH
200



BLACK WASH
201



DARK SAND
847

DARK YELLOW

Large Brush



BASECOAT your tank with *Dark Yellow*. Two thin coats are preferable to one thick coat. Alternatively you can use a *Dark Yellow* spray can for your undercoat.

50% SEPIA WASH 50% BLACK WASH

Large Brush



WASH the tank with a mixed wash. Try to achieve an even coat over the whole tank, letting the wash pool in the recesses without building up too much on flat surfaces.

DARK YELLOW

Large Brush



TIDY UP the wash with *Dark Yellow* using a combination of drybrushing and layering, while leaving the recesses dark.

50% DARK YELLOW 50% DARK SAND

Drybrush



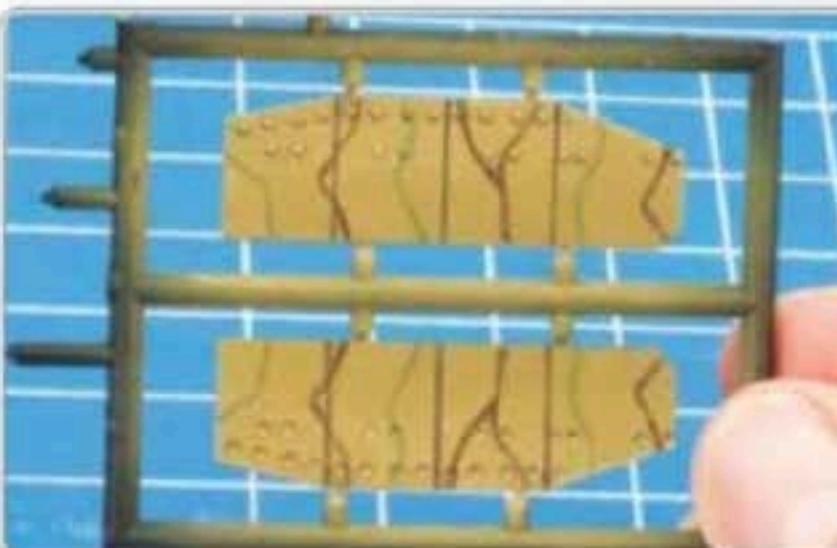
DRYBRUSH the tank with a mix of *Dark Yellow* and *Dark Sand*, concentrating on edges, raised details and upper surfaces, to add highlights.

The best way to paint RAL 7028 Dunkelgelb (Dark Yellow), ubiquitous on German armour vehicles and artillery from 1943 onward, is hotly debated by modellers everywhere.



SOFT-EDGED CAMOUFLAGE—GERMAN

COLOUR PALETTE

DARK YELLOW
978REFLECTIVE GREEN
890CHOCOLATE BROWN
872SEPIA WASH
200

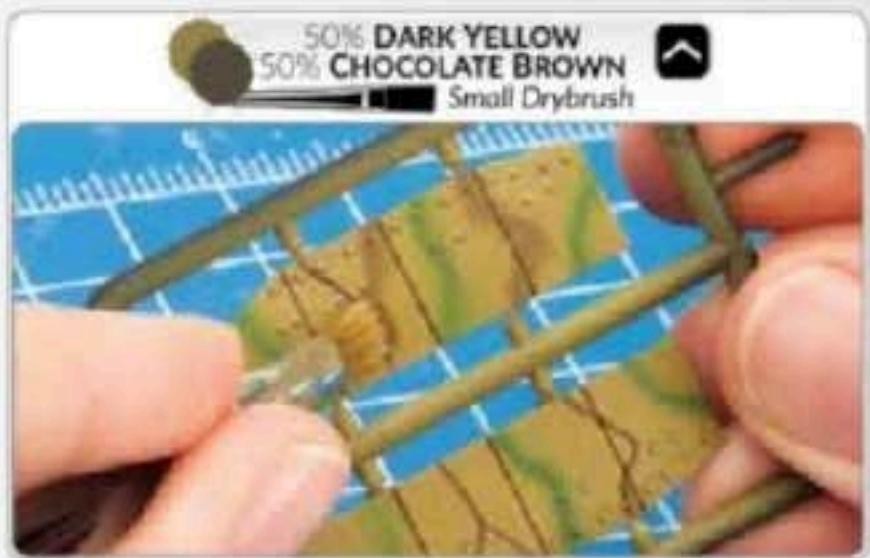
PLAN the pattern of your camouflage scheme and mark the centre of where the areas of colour will go, using thin lines of Reflective Green and/or Chocolate Brown.



STIPPLE a mix of Reflective Green and Dark Yellow, aiming to achieve a soft, feathered edge (see 'Drybrushing' on page 14 for more on the stippling technique).



DAB pure Reflective Green into the centre of the stippled green areas using gentle, feathery strokes.



STIPPLE a mix of Chocolate Brown and Dark Yellow on to the brown areas, repeating the technique from step 2 above.



REPEAT step 3 above for the brown areas, using pure Chocolate Brown.



RE-APPLY shading around any rivets or other details which have been covered with camouflage using a targeted wash of Sepia Wash - this step is entirely optional.

GERMAN TRACKS

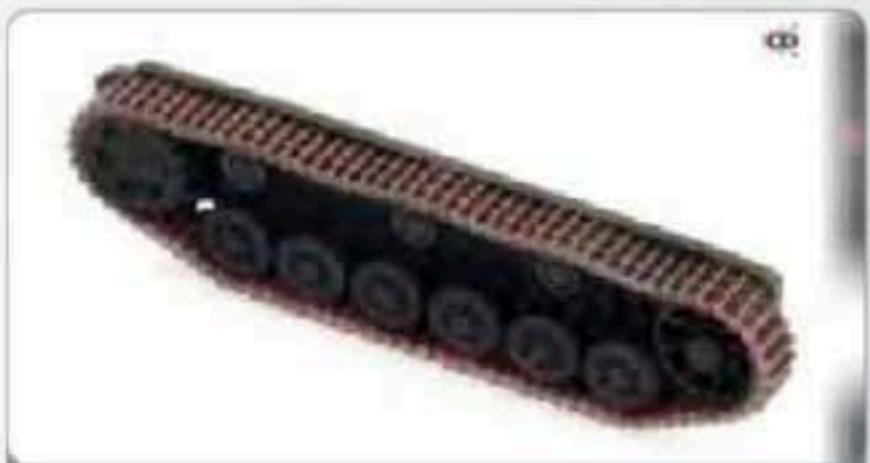
COLOUR PALETTE

SADDLE BROWN
940

German track links were coated in a red oxide primer. This would wear off quickly with use, but traces would remain on low-contact surfaces. If you want a darker primer colour try Hull Red.



BASECOAT the tracks with Saddle Brown. Don't worry too much about getting a perfectly neat coverage, as most of the colour will be covered up in following steps.



Once you've basecoated the tracks Saddle Brown, follow the rest of the steps for basic tracks (see page 27). You don't have to paint your tracks as 'primed', but it gives your German tanks a unique visual difference.

HARD-EDGED CAMOUFLAGE—GERMAN

COLOUR PALETTE

REFLECTIVE GREEN
890CHOCOLATE BROWN
872DARK YELLOW
978

REFLECTIVE GREEN

Medium Brush



OUTLINE a camouflage pattern with *Reflective Green*. Feel free to use your imagination, but it is always a good idea to look at historical photos or other references for pattern ideas.

REFLECTIVE GREEN

Medium Brush



FILL IN the outlines with *Reflective Green*. Thin your paint just enough so that it covers efficiently without leaving brush strokes - practice makes perfect!

CHOCOLATE BROWN

Medium Brush



REPEAT the first two steps with *Chocolate Brown*. You could easily reverse the colour order, depending on the particular pattern you have chosen.

DARK YELLOW

Large Drybrush



LIGHTLY DRYBRUSH the tank with *Dark Yellow* to tone the camouflage down and tie it all together.

Hard-edged patterns are simpler to apply. You just outline the areas of colour and then fill them in.

German camouflage paint could be sprayed or brushed on, but spraying was far more common. However, the soft edges of many spray patterns might be barely discernible at miniature scale, so don't feel that you are being 'ahistorical' by using the easier option.

HARD-EDGED CAMOUFLAGE—OTHER NATIONS

Too many different camouflage patterns were used by all nations throughout the war to cover them all in detail here. Plenty of references are available to inspire and guide you. The same principle of applying an outline first, and then filling it in, will work for any hard-edged pattern.



AMERICAN M4A1 SHERMAN (76MM) with cloud-shaped black disruptive camouflage over the Olive Drab base colour.



BRITISH MATILDA II (2PDR) in the distinctive 'Counter' scheme (Deck Tan, Green Grey, German Fieldgrey) used in the desert in 1940–'41.



BRITISH BEDFORD QLT 3-TON LORRY in the 'Mickey Mouse' camouflage scheme of overlapping Black circles on Bronze Green.



SOVIET T-34 (76MM) with large patches of Flat Earth painted over the Camouflage Olive Green base colour.



BRITISH M3 GRANT (75MM AND 37MM) in Dark Sand, with camouflage patches of Olive Drab, bordered with Black and White.



BRITISH SHERMAN (75MM) in Bronze Green with Flat Brown disruptive camouflage.

GERMAN TANK NUMBERS

Panzer divisions consisted of a brigade, initially with two regiments until 1941, when it was reduced to a single regiment. Each regiment had two battalions (or up to four if there was only a single regiment), and each battalion had three or four companies, with four platoons in each company and three to five tanks in each platoon.



Tactical markings are an excellent way of adding visual and historical interest to your models. Most German tanks feature an identifying number and a *Balkenkreuz* cross symbol on the hull sides. Most German tanks also have divisional markings, as shown here on this tank from the 11th Panzer Division, also known as the Ghost Division.



While most units in the German Army followed the three-digit tank numbering system that denoted where in the formation each tank is from, occasionally some only chose to display company numbers, while others left the company numbers off, only displaying the platoon and tank number.

113

*Kursk: During the preparation for the epic battle of Kursk, some divisions changed their symbols to obscure their identity as they maneuvered into position. Divisions reverted back to their regular symbols after Kursk.



LATE-WAR HEER DECALS

Flames Of War decals combine the most common markings and number styles into convenient sets. Most platoon boxes contain a small decal sheet with markings specific to those vehicles. For larger quantities and variety of markings, use the decal packs.

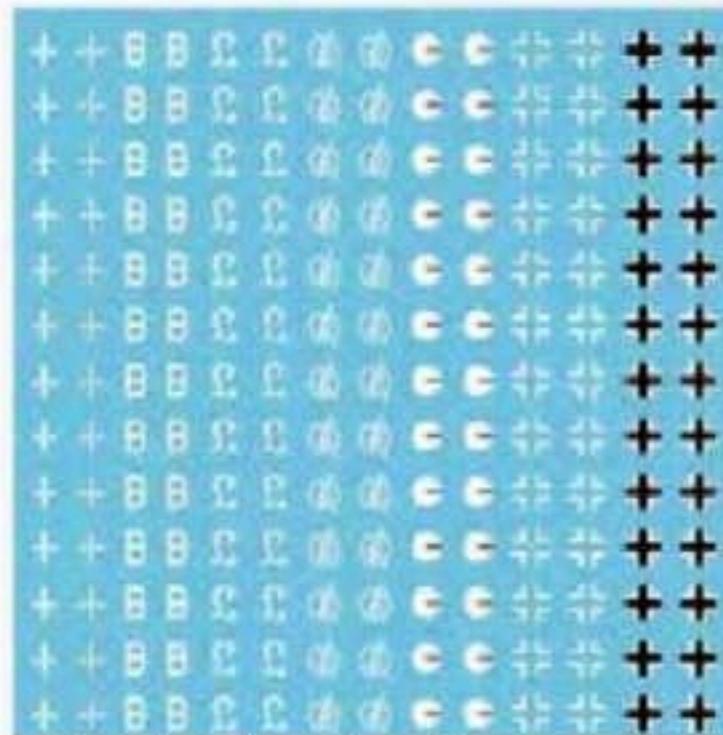
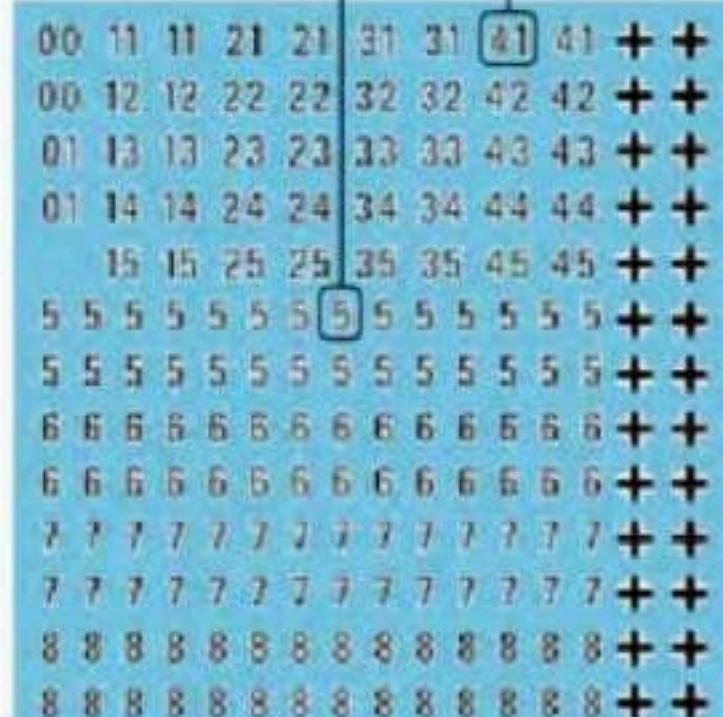
It should be noted that divisional symbols are not an exact science.

There are all sorts of examples of personalised symbols or variations on existing ones. Sometimes, like for the battle of Kursk, units' symbols were changed to obscure their identity as they manoeuvred into position.

The next few pages provides a basic explanation of what the symbols are and where to put them on your vehicles.

TANK NUMBERS

To keep as much variety as possible the platoon and tank numbers have been printed together, while the company number is separate.



PANZERGRENADIER DIVISION GROSSDEUTSCHLAND
Eastern Front 1942-1945

3. PANZER DIVISION
Poland 1939
Western Campaign 1940-41
Eastern Front 1941-45

12. PANZER DIVISION
Eastern Front 1941-45

20. PANZER DIVISION
North Africa 1941-43
Western Front 1944-45
Eastern Front 1945

PANZER LEHR
Western Front 1943-45

HERMANN GORING PANZER DIVISION
Italy 1942-45
Eastern Front 1941-45

2. PANZER DIVISION
Poland 1939
Western Campaign 1940
Balkan Campaign 1941
Eastern Front 1941-43
Western Front 1944-45

11. PANZER DIVISION
Balkan Campaign 1941
Eastern Front 1941-45
Western Front 1944-45

19. PANZER DIVISION
Eastern Front 1941-45

B
North Africa 1941-43
Western Front 1944-45
Eastern Front 1945

26. PANZER DIVISION
Italy 1942-45

13. PANZER DIVISION
Eastern Front 1941-45

To make the 13. Panzerdivision symbol, use the 11. Panzerdivision symbol and add another thin yellow line to make a cross.



AFRIKAKORPS DECALS

The Deutsches Afrikakorps is one of the most iconic units of the war, so it's no surprise that it's also a very popular force in *Flames Of War*.

They have a unique set of markings that warrants their own set of decals.



AFRIKAKORPS PALM

In addition to their divisional symbols, German vehicles in the North African campaign also bore a variation of the famous palm tree of the Deutsches Afrikakorps. These were often hand painted, so the decal sheet provides two different options.

TANK NUMBERS

Most tanks in the North African theatre used the same 3-digit numbering system as the rest of the German army, using red numbers with a white outline.



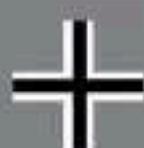
Generalmajor Erwin Rommel rode around in his personal SdKfz 250 half-track, which was called Grieß, meaning both Griffin and Attack.

11 11 21 21 31 31 41 41
12 12 22 22 32 32 42 42
13 13 23 23 33 33 43 43
14 14 24 24 34 34 44 44
15 15 25 25 35 35 45 45
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1111111111111111
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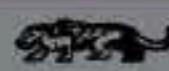
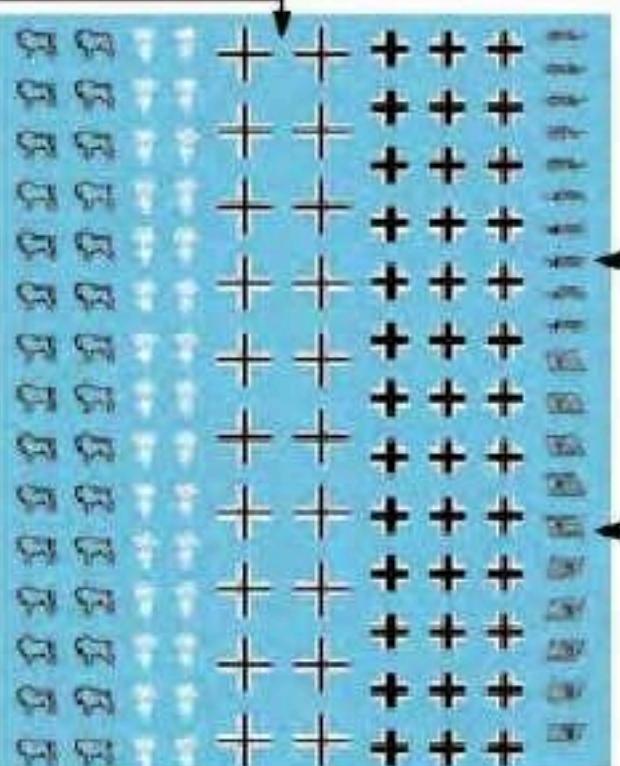
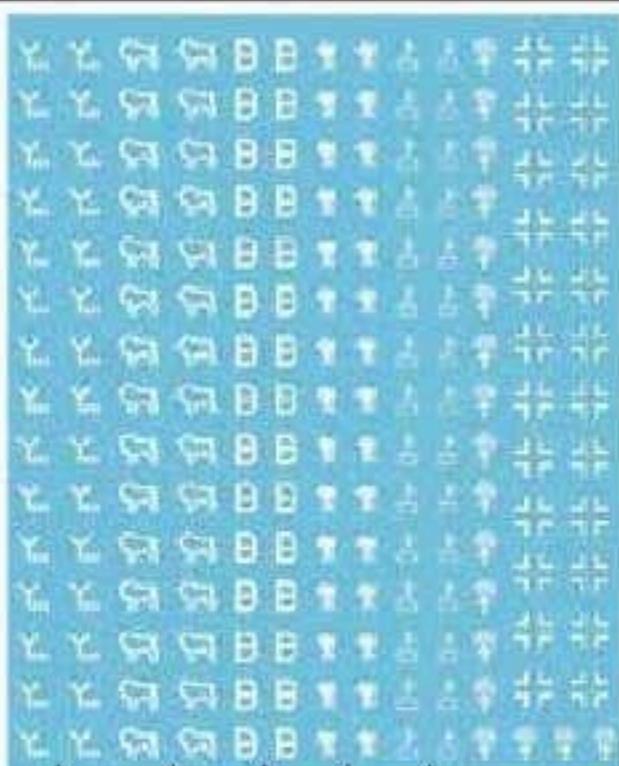
PANZER REGIMENT 8
Vehicles in
15. Panzerdivision
often displayed the
Wolfsangel symbol
in addition to their
divisional symbol.



CAPTURED CROSSES

Due to lack of supply, the Deutsches Afrikakorps pressed large numbers of captured vehicles into service.

To avoid friendly fire they painted oversized crosses onto the turrets.



501/424. SCHWERE PANZER ABTEILUNG
North Africa 1943
Eastern Front 1943-45



504. SCHWERE PANZER ABTEILUNG
North Africa 1943
Italy 1943-45



10. PANZER DIVISION
Eastern Front 1941-42
Dieppe 1942
North Africa 1942-43



21. PANZER DIVISION
North Africa 1941-43
Western Front 1944-45
Eastern Front 1945



164. LEICHTE AFRIKADIVISION
North Africa 1941-43



90. LEICHTE AFRIKADIVISION
North Africa 1941-43



WEATHERED PAINT

COLOUR PALETTE

IRAQI SAND
819BLACK GREY
862SEPIA WASH
200BUFF
976

BASECOAT, WASH, AND TIDYUP your tank. The example here is a Panzer III in Dark Sand.

IRAQI SAND → Small Brush



PAINT chips and scratches, concentrating on edges and areas of heavy use. Starting with a light colour helps delineate chipped areas, making them stand out.



BLACK GREY → Small Brush



FILL IN the centre of the chips and scratches with Black Grey (or German Grey), leaving the lighter edges showing. Try to keep chips small for a realistic effect.



SEPIA WASH → Small Brush

ADD DECALS to the tank, following the guide on the previous pages. See useful tips for applying decals effectively on page 30.



TARGET WASH recesses with Sepia Wash around decals, to ensure they are shaded consistently with the rest of the vehicle, as well as to simulate built-up dirt and grease.

DRYBRUSH the whole tank lightly with Buff, giving it a dusty appearance. This also helps to give the tank a final highlight, emphasising edges and details. If your vehicle has a darker base colour you could drybrush with Dark Sand or Iraqi Sand instead.

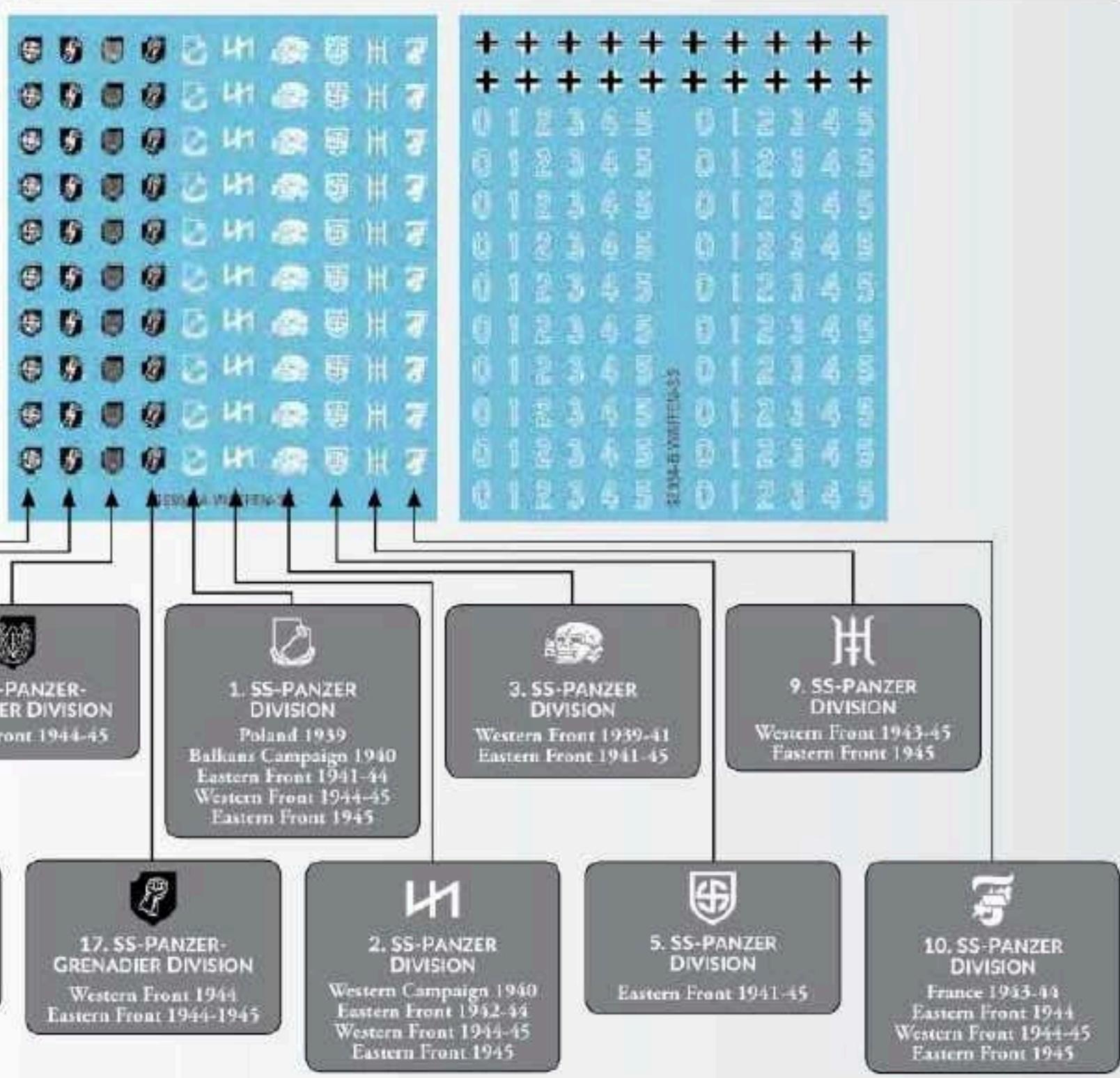


More examples of chipped paint. Note how adding chips or scratches over decals helps set the decal off. Chips and scratches are good places to start streaking from.



WAFFEN-SS DECALS

Waffen-SS troops enjoyed a special esprit de corps, owing to their perceived status as an elite formation. They therefore tended to place more than the usual amount of emphasis on unique and recognisable divisional heraldry.



WHERE MARKINGS GO

As with all wartime markings, there is no one correct answer where to put your markings as they could differ from unit to unit.

When you are getting ready to apply your decals the best thing to do is look at some historical photos for inspiration. A Google image search or visiting our website are good places to start.

As a general rule tanks usually have unit numbers painted on the sides, and sometimes, rear of their turrets. There is usually at least one Balkenkreuz visible on each side of the tank, except the front, while divisional symbols can usually be found on the front and rear of vehicles. Below are some examples from Battlefront's collection.





GERMAN INFANTRY

Helmets
GER. CAM. DARK GREEN 979

Painted Metal Weapons
DARK YELLOW 978

Webbing & Pouches
SEE PAINTING BLACK PAGE 27

Uniform
GERMAN FIELD GREY 830

Rifles, SMGs, & MGs
SEE INFANTRY WEAPONS PAGE 27

Canteen
GERMAN CAMO MEDIUM BROWN 826

Flesh
SEE FACES PAGE 24

Boots
SEE BROWN LEATHER PAGE 26

Gas-mask Cannister
GER. CAM. DARK GREEN 979

ZELTBAHNS

Zeltbahn rolled up
Zeltbahn worn as a poncho

The Zeltbahn was a triangular section of waterproof camouflage fabric carried by every German soldier. They could be buttoned together to form several different sizes of tent. It could also be worn as a rain-proof poncho.

GRENADIER UNIFORMS

COLOUR PALETTE

- GERMAN FIELD GREY WWII 830
- GER. CAM. DARK GREEN 979
- BLACK WASH 201
- STONE GREY 884

GERMAN FIELD GREY Large Brush

GER. CAM. DARK GREEN Medium Brush

BLACK WASH Large Brush

BASECOAT the uniform (including greatcoats) with German Field Grey.

BASECOAT the helmet, gas-mask canister, and the mess tin on figures which have one, with Ger. Cam. Dark Green.

WASH the figure with Black Wash to create shading.

GERMAN FIELD GREY Medium Brush

75% GER. CAM. DARK GREEN 25% GERMAN FIELD GREY Medium Brush

75% GERMAN FIELD GREY 25% STONE GREY Fine Brush

TIDY UP the uniform with German Field Grey, leaving darker shading in the folds and recesses.

HIGHLIGHT the helmet and gas-mask canister with a mix of Ger. Cam. Dark Green and German Field Grey.

HIGHLIGHT the edges and raised folds of the uniform with a mix of German Field Grey and Stone Grey.

ACTUAL SIZE

The standard German uniform colour, *Feldgrau* ('field grey'), was actually a muted, drab green. Helmets and some other metal items of personal gear were painted in a much darker green colour which, confusingly, was also named *Feldgrau*.



WAFFENFARBE (EPAULETTE SERVICE COLOURS)

Shoulder boards are the simplest and most visually prominent German insignia. The German *Waffenfarbe*, or the arm-of-service colour, denotes the soldier's speciality. This is denoted by coloured piping around the shoulder boards. Glancing at two figures, one with the shoulder boards and one without, the figure with them will seem to have an entire additional level of detail and accuracy. The modelling of the shoulder boards on the miniatures will actually aid you with your painting. As they are both well defined and raised there is no need to guess how big or where to place them, and the hard edge allows more freedom with the brush. Below is a list of the most common colours found in a *Flames Of War* force.

GENERAL STAFF

957 Dark Red (75%), & 930 Dark Blue (25%)

INFANTRY (GRENADIERS)

951 White

GENERALS, ARTILLERY & ANTI-AIRCRAFT

957 Flat Red

PANZERGRENADIERS & MOTORCYCLE UNITS

823 Luftwaffe Camo Green

CAVALRY

915 Golden Yellow Yellow

MOTORISED RECONNAISSANCE

929 Light Brown

PIONEERS

950 Black

JÄGER & GEBIRGSJÄGER INFANTRY

883 German Camo Bright Green

ROCKET & CHEMICAL

957 Dark Red (75%), & 930 Dark Blue (25%)

SS-GENERALS AND STAFF

886 Green Grey

AIR CREW, FALLSCHIRMJÄGER, ETC.

915 Golden Yellow Yellow

SS-PANZERGRENADIERS & HERMANN GÖRING

951 White

ARMOURED & PANZERJÄGER

835 Salmon Rose

PAINTING WAFFENFARBE

COLOUR PALETTE



Painting piping is a lot easier if you use a two-step process.

WHITE

Medium Brush



PAINT the whole shoulder strap White.

GER. CAM. DARK GREEN

Fine Brush



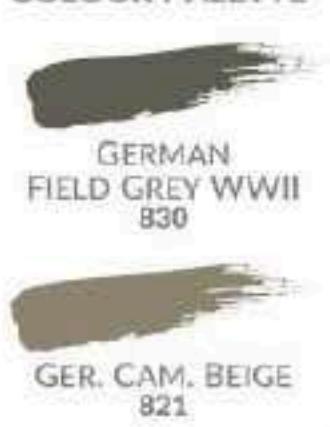
PAINT the centre Ger. Cam. Dark Green, leaving a fine line of White showing.



You can really go all out with uniform markings - maybe not for every team, but it can make command teams stand out.

SMG POUCHES

COLOUR PALETTE



Unlike most webbing items, pouches for SMG ammunition were canvas.

GERMAN FIELD GREY

Large Brush



BASECOAT pouches with German Field Grey.

50% GERMAN FIELD GREY 50% GER. CAM. BEIGE

Medium Brush



PAINT a mix of German Field Grey and Ger. Cam. Beige, leaving shaded

GER. CAM. BEIGE

Fine Brush



HIGHLIGHT the edges with Ger. Cam. Beige to increase definition.

AFRIKA KORPS INFANTRY

Helmets & Painted Metal

GREEN BROWN
879

or

TAN YELLOW
912

Rifles, SMGs, & MGs

SEE INFANTRY WEAPONS
PAGE 25

Flesh

SEE FACES
PAGE 24

Webbing

STONE GREY
884

Uniform

YELLOW GREEN
881

Boot Uppers

GER. CAM. BEIGE
821

Boots and Ammo Pouches

BEIGE BROWN
875



The *Afrika Korps* uniform, developed by the Tropical Institute of Hamburg, was made from olive-coloured light-weight cotton fabric, cut in the same style as the European uniform.

Canvas belts and 'Y' strap suspenders were made to replace the usual leather versions, which were less suited to the desert climate.

Footwear consisted of knee-length green canvas boots, with brown leather reinforcing. Shorter ankle-high boots of the same materials were also made, and proved more popular—some soldiers modified their high boots by cutting them down to ankle-length.

AFRIKA KORPS INFANTRY

COLOUR PALETTE



YELLOW GREEN
881



STONE GREY
884



BEIGE BROWN
875



SEPIA WASH
200

YELLOW GREEN
Medium Brush



BASECOAT the uniform with Yellow Green, using two thin coats if necessary for an even coverage.

STONE GREY
Small Brush



PAINT the canvas webbing gear Stone Grey.

BEIGE BROWN
Small Brush



PAINT the leather ammunition pouches and rifle sling Beige Brown. They could also be black.

SEPIA WASH
Medium Brush



WASH the figure with Black wash or Sepia Wash to add shading. You could use Black Wash instead.

75% YELLOW GREEN
25% STONE GREY
Small Brush



HIGHLIGHT raised areas of the uniform using Yellow Green lightened with a little Stone Grey.

The olive green colour of the *Afrika Korps* uniform faded to a pale dusty colour in the harsh desert environment. Veterans could be discerned from new arrivals by the faded condition of their uniforms.



SPLINTER PATTERN CAMOUFLAGE

Splittermuster (German for splinter-pattern) was developed by Germany in the late 1920s, and was issued to most Heer units. The *Zeltbahn* tent quarter in Splinter pattern was the only official Army camouflage until 1942, when they added the smocks and helmet covers, in the same pattern. Only one side of each was printed in *Splittermuster*, while the other side was left white for snow camouflage.

In April 1942 a small number of *Wintertarnanzug* suits, consisting of a padded jacket, trousers, separate hood and mittens were produced. These were also printed only on one side and were left white on the other side.

The splinter pattern consists of a disruptive pattern of hard-edged polygons, with sharp corners between coloured patches. A random pattern of dashes (giving splinter its name) was applied in places to improve the camouflage effect.



SPLITTERMUSTER (SPLINTER PATTERN)



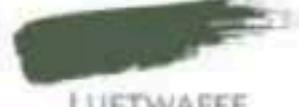
The Luftwaffe (like the artwork to the left) used a slightly different version of Splinter to Heer troops (above). You can paint both of these the same way, just add a bit of Green Ochre to the Ger. Cam. Beige for the Luftwaffe version.



The Herman Göring Division in Italy had access to a variety of different uniforms. You may wish to paint some battle-worn veterans from North Africa with their old tropical uniforms using Yellow Green for their pants. Alternatively, you can paint their pants in captured Italian camouflage, using Gunship Green, Chocolate Brown and Dark Yellow.

SPLINTER CAMOUFLAGE

COLOUR PALETTE

GER. CAM. BEIGE
821BLACK WASH
201GER. CAM.
MEDIUM BROWN
826LUFTWAFFE
CAM. GREEN
823

Like any camouflage pattern, Splinter is quite a challenge to paint. But if you want a German infantry army, you will almost inevitably have to tackle it eventually. Don't worry! It is easier than it looks, once you give it a try.

GER. CAM. BEIGE

Large Brush



BLACK WASH

Large Brush



GER. CAM. BEIGE

Medium Brush



BASECOAT helmet covers, camouflage smocks and Zeltbahns (here worn as a poncho) with Ger. Cam. Beige.

WASH with Black Wash to create depth and shading.

TIDY UP with Ger. Cam. Beige, leaving darker shading in the folds and recesses.

GER. CAM. MEDIUM BROWN

Fine Brush



PAINT an angular, zigzag pattern with Ger. Cam. Medium Brown. Aim to cover approximately one-third of the surface.

LUFTWAFFE CAM. GREEN

Fine Brush



PAINT patches of Luftwaffe Cam. Green between the brown, again aiming to create jagged, angular shapes. Mix in a bit of Ger. Cam. Bright Green if you want a brighter green.

LUFTWAFFE FELDDIVISION JÄGER

COLOUR PALETTE

LUFTWAFFE UNIFORM
816BLACK WASH
201FLAT BLUE
962

LUFTWAFFE UNIFORM

Medium Brush



BASECOAT the trousers and field cap with Luftwaffe Uniform.

BLACK WASH

Medium Brush



WASH with Black Wash to create depth and shading.

75% LUFTWAFFE UNIFORM 25% FLAT BLUE

Fine Brush



OPTIONALLY HIGHLIGHT with a mix of Luftwaffe Uniform and a Flat Blue.

WHITE CAMOUFLAGE UNIFORMS

COLOUR PALETTE

LONDON GREY
836SKY GREY
989WHITE
951

LONDON GREY

Medium Brush



BASECOAT the uniform and helmet with London Grey.

SKY GREY

Medium Brush



PAINT with Sky Grey, leaving darker shadows in the folds and recesses.

WHITE

Fine Brush



HIGHLIGHT with White, using the layering technique (see page 13).

WAFFEN-SS CAMOUFLAGE PATTERNS

Waffen-SS front-line combat formations were easily recognisable from the *Heer* by their distinctive camouflage clothing.

By 1944, several patterns were developed such as Plane Tree, Palm and Oak Leaf. Each of these was produced in several versions with different colours for different seasons, as well as unique printing effects such as blurred edges. All this material was printed with autumn colours on one side and spring or summer on the other, making them reversible and capable of being worn almost all year round. There was also a reversible padded winter uniform with spring Oak Leaf on one side and white on the other.

There were a number of different camouflage schemes. Shown here are some of the more common ones.



It may seem daunting to paint complex SS camouflage patterns. However, you can simplify the details and still clearly emulate the overall effect.

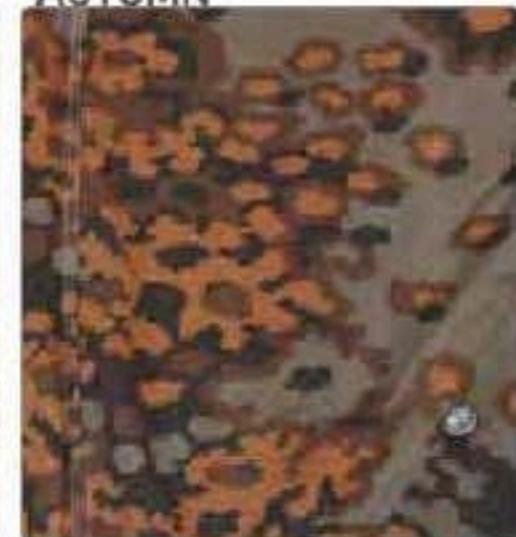
EICHENLAUBMUSTER (OAK LEAF A)

Oak Leaf A was in use from 1943 until the end of the war. Both the spring and autumn sides can use the same base colour.

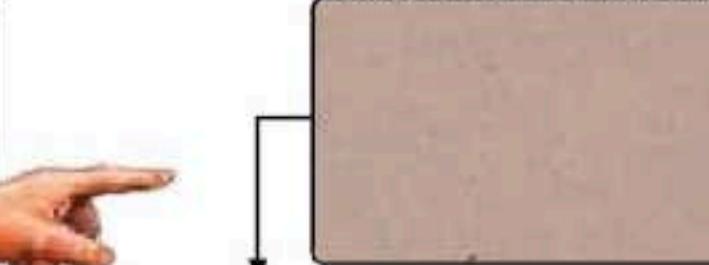
SPRING



AUTUMN



GER. CAM. PALE BROWN



GER. CAM. DARK GREEN



GER. CAM. BLACK BROWN



GER. CAM. BRIGHT GREEN



LIGHT BROWN

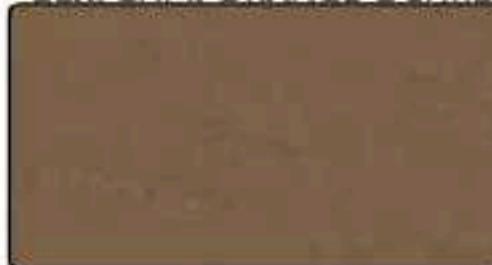


ERBSENMUSTER (PEA DOT PATTERN)

The Pea Dot pattern was produced from 1944.



GER. CAM. ORANGE OCHRE



GER. CAM. DARK GREEN



STONE GREY



GER. CAM. BRIGHT GREEN



OAK LEAF A

COLOUR PALETTE



GER. CAM. PALE BROWN
825



SEPIA WASH
200



GER. CAM.
BLACK BROWN
822



LIGHT BROWN
929

The Oak Leaf pattern was found on helmet covers, Zeltbahn tent quarters and camouflage smocks. Smocks were worn over the regular uniform, so paint the trousers and collars German Field Grey (see page 63).

GER. CAM. PALE BROWN

Medium Brush



BASECOAT the helmet cover and smock (note the loose sleeves and gathered cuffs) with Ger. Cam. Pale Brown.

SEPIA WASH

Large Brush



WASH with Sepia Wash to add shading to the fabric folds.

GER. CAM. PALE BROWN

Medium Brush



HIGHLIGHT with Ger. Cam. Pale Brown and tidy up any messy areas of wash, but leave shading in folds and recesses.

GER. CAM. BLACK BROWN

Fine Brush



PAINT a dappled pattern of patches and spots in Ger. Cam. Medium Brown (for the autumn pattern).

LIGHT BROWN

Fine Brush



PAINT smaller dots of Light Brown within the Ger. Cam. Medium Brown areas.

PEA DOT PATTERN

COLOUR PALETTE



GER. CAM.
ORANGE OCHRE
824



SEPIA WASH
200

Pea Dot was used on tunics and a special two-piece camouflage suit (pictured) but never on helmet covers or camouflage smocks.

GER. CAM. ORANGE OCHRE

Medium Brush



BASECOAT the tunic (recognisable by the straight sleeves and the pockets on the front) Ger. Cam. Orange Ochre.

SEPIA WASH

Large Brush



WASH liberally with Sepia Wash to add shading and definition. Add a bit of Black Wash for slightly darker shadows.

GER. CAM. ORANGE OCHRE

Fine Brush



TIDY UP with the wash with Ger. Cam. Orange Ochre.

GER. CAM. DARK GREEN

Fine Brush



PAINT dots and small irregular patches of Ger. Cam. Dark Green.

STONE GREY

Fine Brush



PAINT similar dots and patches with Stone Grey, or Ger. Cam. Pale Brown if you don't have Stone Grey.

GER. CAM. BRIGHT GREEN

Fine Brush



ADD small dots of Ger. Cam. Bright Green. Paint the helmet cover Oak Leaf A (see above).

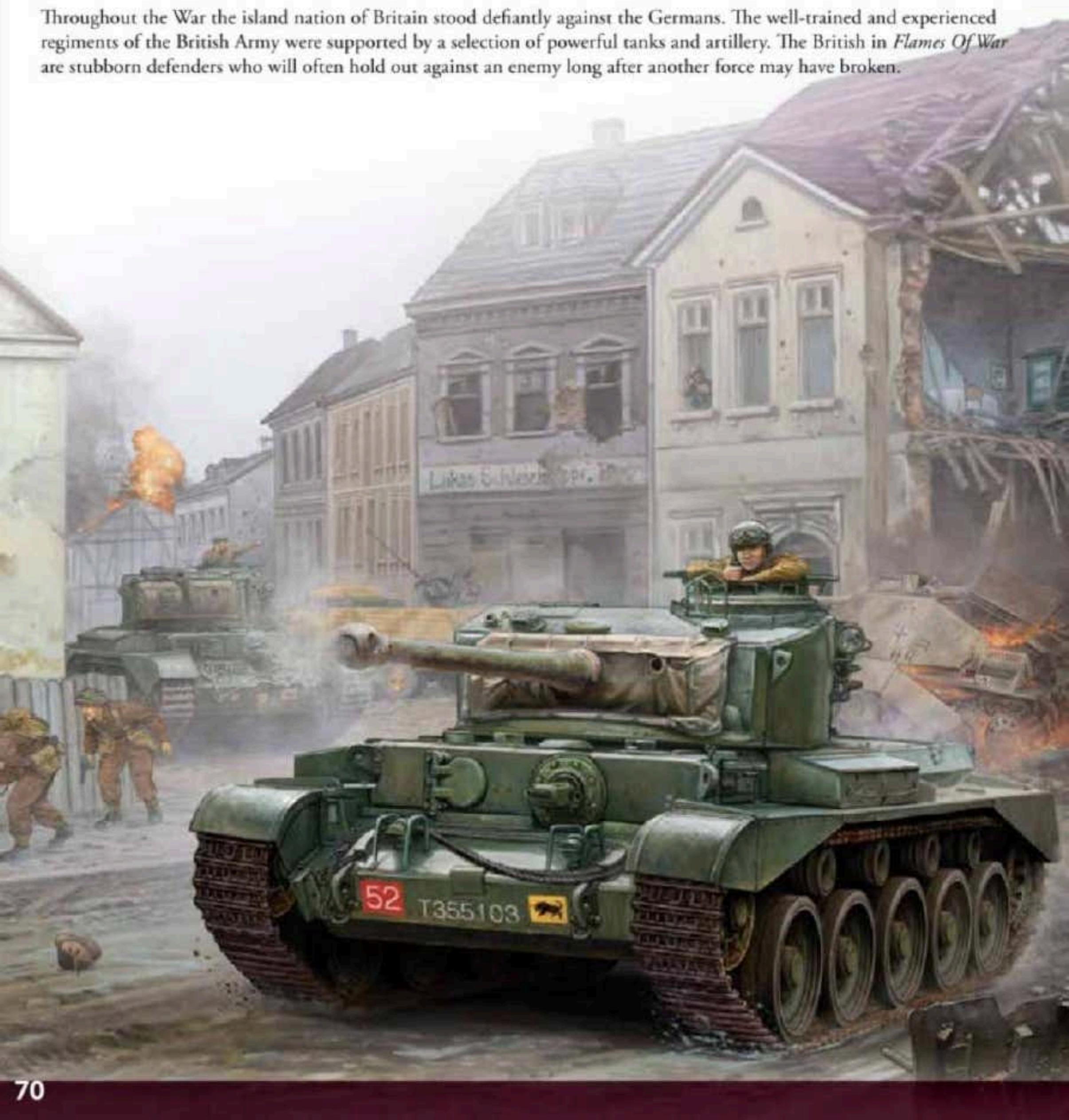


BRIITISH

*"If you have an important point to make, don't try to be subtle or clever.
Use a pile driver. Hit the point once. Then come back and hit it again.
Then hit it a third time - a tremendous whack."*

-Winston Churchill

Throughout the War the island nation of Britain stood defiantly against the Germans. The well-trained and experienced regiments of the British Army were supported by a selection of powerful tanks and artillery. The British in *Flames Of War* are stubborn defenders who will often hold out against an enemy long after another force may have broken.





BRITISH ARMOUR
PAGES 74-77

INFANTRY WEAPONS
PAGE 25

MARKINGS
PAGES 75, 77 & 78-80

DECALS
PAGE 30



TANK TRACKS
PAGE 27

SHERMAN TRACKS
PAGE 38

TOOLS
PAGE 28

PAINTING BLACK
PAGE 27

WEATHER EFFECTS
PAGE 31





1939

SEPTEMBER 4-10:
The British Expeditionary Force (BEF) arrives in France.

1940

MAY 10:
Germany invades France and the Low Countries.

MAY 26 - JUNE 4:
Evacuation of the BEF through Dunkirk.

JUNE 10:
Italy declares war on France and Britain.

DECEMBER 9 - FEBRUARY 9:
British launch Operation Compass and destroys Italian forces in Egypt.

1941

MARCH 12:
Germans arrive in North Africa, and recapture Cyrenaica. Tobruk besieged.

APRIL 6:
British troops sent to reinforce Greek army.

MAY 15 AND JUNE 15:
British launch Operations Brevity and Battleaxe to relieve Tobruk but Axis counterattacks halt progress.

MAY 20:
British and Commonwealth forces withdraw from Crete following German invasion.

JUNE 8:
Allies launch Operation Exporter and invade Syria.

NOVEMBER 18:
British launch Operation Crusader and recapture Cyrenaica.

1942

JANUARY - JUNE:
The battles of Gazala push the Eighth Army to El Alamein.

JULY - OCTOBER:
First and Second Battles of El Alamein



Matilda II (2pdr)

BASE COLOUR

OLIVE DRAB
887

CAMOUFLAGE

GER. CAM. DARK GREEN
979



A13 Cruiser Mk III (2pdr)

BASE COLOUR

REFLECTIVE GREEN
890

CAMOUFLAGE

OLIVE DRAB
887



A13 Cruiser Mk IV (2pdr)

BASE COLOUR

DECK TAN
986

CAMOUFLAGE

GREEN GREY
971

CAMOUFLAGE

GERMAN
FIELD GREY WWII
830



Crusader I (2pdr)

BASE COLOUR

DARK SAND
847

OR

IRAQI SAND
819

BEF Infantry Tanks

All vehicles and guns belonging to the Infantry Tank Companies, Divisional Cavalry Squadrons, or Rifle Companies, and those from Divisional Support units had wavy diagonal and horizontal bands in Dark Green G4 (German Cam. Dark Green) painted over the basic colour of Khaki Green G3 (Olive Drab).

BEF Armour

Light and cruiser tanks from the Armoured Regiments of the 1st Armoured Division had their Khaki Green G3 covered by Light Green G5 (Reflective Green) over most of the vehicle, leaving wavy diagonal and horizontal bands of Khaki Green G3 (Olive Drab) as the disruptive camouflage colour.

Caunter Camouflage

A lot of 7th Armoured Division's tanks were painted in a three-colour camouflage scheme known as Caunter. This angular scheme was made up of three colours in a complex pattern of straight disruptive lines.

Desert Colours

Desert camouflage sparked quite a debate as far as what colours and patterns were best. However, after much discussion and testing, a simple yellow sand colour, Light Stone No. 61 (Dark Sand) was used for the duration of 1941 and into 1942.



NOVEMBER 2:
Operation Supercharge at El Alamein, results in the defeat of Axis forces in Egypt.
NOVEMBER 8:
Operation Torch, a joint US-British force lands in Africa.

1943

MARCH 19:
British Eighth Army assaults the Mareth Line in Tunisia.
MAY 13:
German and Italian troops in North Africa surrender.
JULY 9/10:
Allies invade Sicily.
SEPTEMBER 8:
Italy surrenders to the Allies.
SEPTEMBER 9:
Allies land at Salerno in Italy.

1944

JANUARY 4 - MAY 18:
Battle of Monte Cassino begins.
JANUARY 22 - JUNE 5:
Allies land at Anzio.
JUNE 5:
Allies liberate Rome.
JUNE 6:
D-Day landings in France.
JUNE 6 - AUGUST 6:
British and Commonwealth forces win the bloody Battle of Caen.
JULY 25-30:
Allies breakout of Normandy.
AUGUST 12-21:
Allied forces close the Falaise Pocket and destroy the German Seventh Army.
SEPTEMBER 17:
Operation Market Garden.
SEPTEMBER - OCTOBER:
Canadian and British forces clear the Scheldt region.

1945

MARCH 23:
British cross the Rhine with Operation Plunder.
MAY 7:
Germany unconditionally surrenders.



Sherman (75mm)

BASECOAT	CAMOUFLAGE	CAMOUFLAGE	CAMOUFLAGE	CAMOUFLAGE
DARK SAND 847	BLACK GREY 862	CHOCOLATE BROWN 872	GER. CAM. DARK GREEN 979	RUSSIAN UNIFORM 924



Lend-lease Valentine (6pdr)

BASE COLOUR

KHAKI GREY 880



Autocar (75mm)

BASE COLOUR

KHAKI 988

CAMOUFLAGE

BLACK 950



Sherman (75mm)

BASE COLOUR

BRONZE GREEN 897

US Equipment

In late 1941 the first of the US lend-lease tanks arrived in North Africa. These were immediately painted in the many various camouflage patterns found in the Eighth Army in North Africa.

Service Colour

The British exported tanks, vehicles and other equipment to the Soviet Union as a part of the Lend-lease program. Tanks, such as this Valentine, were shipped in the standard S.C.C. 2 Service Colour (Khaki Grey) and were seldom repainted.

Sicily and Italy

When the British Army moved out of North Africa and into Italy, a new scheme was applied to their vehicles. This one had a base of Light Mud (Khaki) with cloud-shaped patches of black to better match the hilly terrain of the Italian countryside.

Northwest Europe

During the build-up to the invasion of France, the British switched their basic scheme from Service Colour to S.C.C. 15 Olive Drab. This colour was intended as a match for the US Olive Drab, but it quite quickly faded to a greener shade. All vehicles were thus painted and prepared for the invasion.



EIGHTH ARMY DESERT ARMOUR

COLOUR PALETTE

DARK SAND
847SEPIA WASH
200BLACK WASH
201

DARK SAND

Large Brush



BASECOAT your tank with Dark Sand. Two thin coats are better than one thick coat. For such a light colour, you may find it easier if you use a white or light grey undercoat.

WASH

Large Brush



WASH the tank with Sepia wash or Black wash (or a mix of the two). Try to achieve an even coverage over the whole tank.

DARK SAND

Small Drybrush



TIDY UP the wash with Dark Sand using a combination of drybrushing and layering (see page 12-14).



Finish the tank by painting the tracks and all the appropriate markings and tools. Weather effects are a great way to add individuality and interest to each tank, concentrating especially on details like rivets.

Pale colours like Dark Sand, the most common colour for British desert tanks, can be challenging. To paint over a dark base without getting ugly brush strokes, consider using a white or pale grey primer, to make it easier to get a bright, even finish.

DESERT SAND CAMOUFLAGE

COLOUR PALETTE

DARK SAND
847RUSSIAN UNIFORM
924SEPIA WASH
200IRAQI SAND
819

DARK SAND RUSSIAN UNIFORM

Large Brush



BASECOAT your tank with Dark sand. PAINT Cloud-shaped patches of Russian Uniform. Camouflage was applied from a standard template (see our website for more details).

SEPIA WASH

Large Brush



WASH the tank with Sepia Wash to add shading.

DAK SAND RUSSIAN UNIFORM

Large Brush



TIDY UP the wash with Dark sand & Russian Uniform using a combination of drybrushing and layering, leaving darker shading in recessed areas.

IRAQI SAND

Small Drybrush



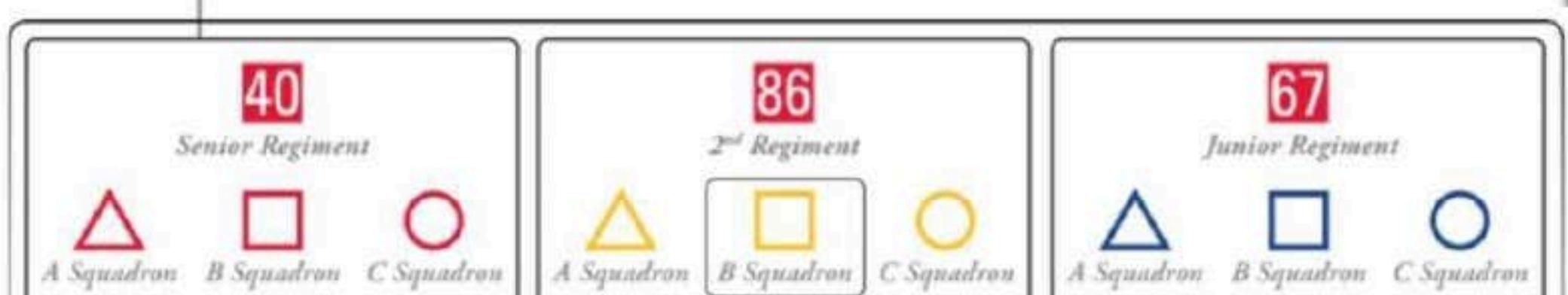
DRYBRUSH the tank with Iraqi Sand, concentrating on edges, raised details, and upper surfaces to add highlights and give the tank a weathered, dusty finish.

The tanks that fought in the Second Battle of El Alamein typically had a two-colour disruptive camouflage pattern, which was intended to make it harder to identify specific vehicle types, rather than hide the vehicle from sight.

Sometimes black or dark brown was substituted for Dark Olive Green



MID-WAR ARMOURED SQUADRON TANK MARKINGS



SQUADRON MARKINGS

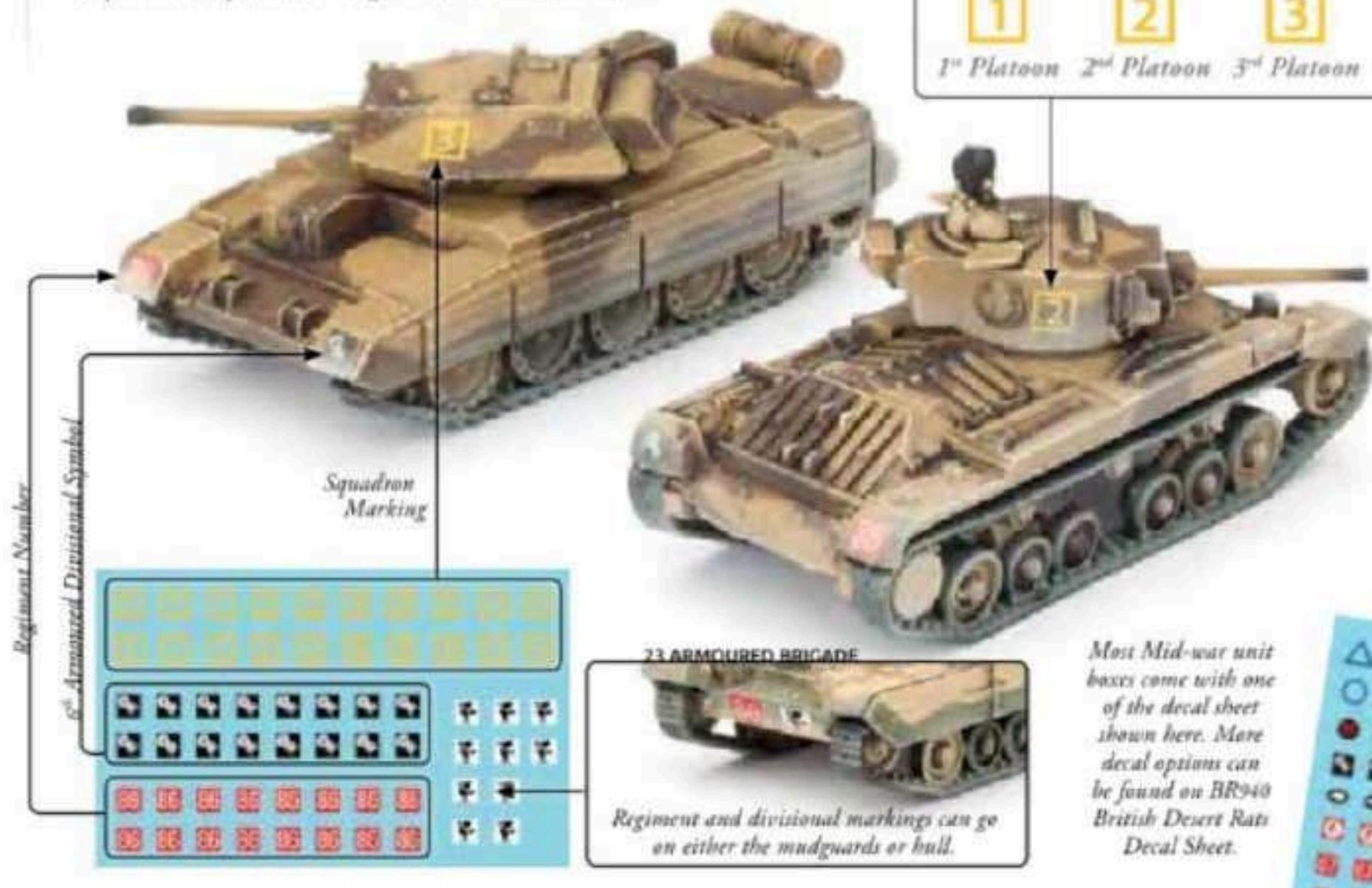
Each tank in a squadron will have the same turret marking. The shape and colour shows the squadron and regiment.

The Crusader below has markings from 3rd platoon, B Squadron, 2nd Regiment, 6th Armoured Division

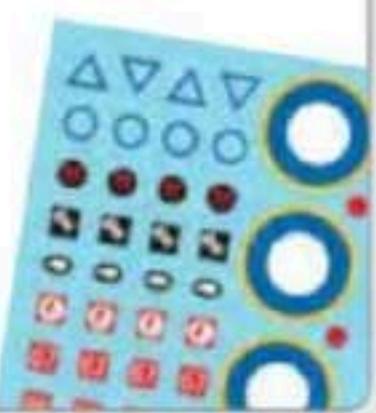
Some units added platoon numbers (or HQ for Headquarters) to the centre of the squadron markings.

HQ
Headquarters

1 2 3 4
1st Platoon 2nd Platoon 3rd Platoon 4th Platoon



Most Mid-war unit boxes come with one of the decal sheet shown here. More decal options can be found on BR940 British Desert Rats Decal Sheet.





BRITISH SERVICE COLOUR



**CHURCHILL III
KINGFORCE**

The Churchill tanks of Kingforce were sent to the desert for Operation Supercharge. These Churchills were painted in standard desert colours.



**CHURCHILL III
S.C.C. 2 SERVICE COLOUR**

More Churchills fought in Tunisia sporting Service Colour and Dark Brown camouflage. Crews often mixed up a mud paste and applied it to their tanks as additional camouflage.

COLOUR PALETTE



KHAKI GREY
880



GER. CAM.
MEDIUM BROWN
826



SEPIA WASH
200



IRAQI SAND
819

KHAKI GREY

Large Brush



GER. CAM. MEDIUM BROWN

Large Brush



BASECOAT your tank with Khaki Grey. Two thin coats are preferable to one thick coat, and you may find it easier if you use a white or light grey undercoat.

SEPIA WASH

Large Brush



KHAKI GREY

Medium Brush



WASH the tank with Sepia Wash to add shading and depth to the model.

GER. CAM. MEDIUM BROWN

Medium Brush



TIDY UP the disruptive camouflage areas in a similar way using Ger. Cam. Medium Brown.

IRAQI SAND

Small Drybrush



DRYBRUSH the tank with Iraqi Sand, concentrating on edges, raised details, and upper surfaces to add highlights and give the tank a weathered, dusty finish.



MID-WAR CHURCHILL TANK MARKINGS





LATE-WAR ARMOURED DIVISION MARKINGS

Below is a diagram explaining how the marking system for typical British armoured divisions worked. The Late-war Decal sheet has markings for the divisions shown below. The Late-war markings are very similar to the Mid-war markings, but Division and Regiment numbers were changed in an effort to confuse the enemy. Check out the website for more in-depth articles.

ARMOURED DIVISION INSIGNIA IN NORMANDY



Guards Armoured Division



7th Armoured Division



11th Armoured Division



4th Canadian Armoured Division

Guards Armoured Division

40



Armoured Division Brigades

Armoured Brigade

50

Brigade HQ

51 52 53

Armoured Regiments

54

Motor Battalion

Infantry Brigade

60

Brigade HQ

61 62 63

Rifle Battalions

64

Machine-gun Battalion

77

Anti-tank Regiment
Royal Artillery

41 46

Field Squadrons,
Royal Engineers

73

Anti-aircraft Regiment

74 76

Field Regiments
Royal Artillery

45

44

Armoured Car Regiment

Armoured Recce Regiment

5 Guards Armoured Brigade - Guards Armoured Division

Brigade HQ

50



2nd Armoured Battalion Grenadier Guards (Senior Regiment)

51



Regimental HQ



A Squadron



B Squadron



C Squadron

1st Armoured Battalion Coldstream Guards (2nd Regiment)

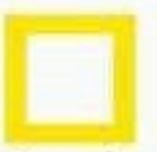
52



Regimental HQ



A Squadron



B Squadron



C Squadron

2nd Armoured Battalion Irish Guards (Junior Regiment)

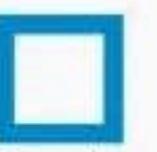
53



Regimental HQ



A Squadron



B Squadron



C Squadron

Each Squadron is usually 20 tanks

1st Motor Battalion Grenadier Guards

54



**79th ARMOURED DIVISION****122**Buffalo
Armoured Transports**1234**AVRE
(Armoured Vehicle Royal Engineers)**157**Kangaroo
Armoured Transports

The 79th Armoured Division contains all of the funnies or specialist tanks such as the bunker-busting AVsRE, the Buffalo amphibious landing craft, and the Ram Kangaroo armoured personnel carrier.

31st Army Tank Brigade**992**

Regimental HQ



A Squadron



B Squadron



C Squadron

45

Regimental HQ



A Squadron



B Squadron



C Squadron

44

Regimental HQ



A Squadron



B Squadron



C Squadron

The markings above are for the 9th Battalion Royal Tank Regiment, equipped with Churchill tanks. To field Churchill Crocodiles from 141st Royal Armoured Corps (The Buffs) use the same markings but use blue squadron markings instead of yellow.

An Armoured Recce Regiment performed a similar role to the armoured cars, but was equipped with Cromwell tanks in Europe and a mix of Shermans and Stuarts in Italy.

Armoured Car Regiments were organised like a tank regiment, but equipped with armoured cars like Daimlers, Humber and Staghounds.

BRITISH ARMOUR IN ITALY**Armoured Division Insignia in Italy**1st Armoured
Division6th Armoured
Division5th Canadian
Armoured Division6th South African
Armoured Division**Independent Armoured Brigades in Italy**9th Armoured Brigade23rd Armoured Brigade4th New Zealand
Armoured Brigade21st Tank Brigade

British armoured divisions followed the same organisation as their counterparts in the rest of Europe. The independent armoured brigades did the same, with the exception that some of them used different battalion numbers.

OTHER TANK MARKINGS**5 15 27 40**

BRIDGE WEIGHTS: Bridge classification numbers identified whether a vehicle was able to cross a bridge or not. Most vehicles only have one bridge weight on the front of the vehicle. Use the 5 on small vehicles like armoured cars, trucks or half-tracks. Use the 15 on Stuart tanks. Use the 27 on medium tanks like Cromwells and Shermans and the 40 on heavy tanks like Churchills and Crocodiles.

T157312
Z4773568
F3634610

SERIAL NUMBERS: Each vehicle has a white serial number. The 'T' series of numbers belongs to tanks, the 'Z' series belongs to half-tracks and the 'F' series belongs to armoured cars and carriers.



ALLIED STARS: Most British vehicles have a small star on each side and often the rear. Most vehicles also have a large star as an air recognition symbol on the cab or the top of the turret.



TYPICAL INFANTRY DIVISION MARKINGS

Below is a diagram explaining how the marking system for typical British infantry divisions worked. The Late-war Decal sheet has markings for the divisions shown below. This is a basic guide to British markings; check out the website for more in-depth articles.

BRITISH INFANTRY DIVISIONS



50th
Infantry
Division



51st
Infantry
Division



78th
Infantry
Division



1st
South African
Infantry Division



1st Canadian
Infantry
Division



4th Indian
Infantry
Division



2nd
New Zealand
Infantry Division

Infantry Division



Infantry Division HQ

1st Brigade



Infantry Battalions

2nd Brigade



Infantry Battalions

2nd Brigade



Infantry Battalions

Other Arms of Service



Field Regiments, Royal Artillery



Reconnaissance Regiment



Field Companies, Royal Engineers



Light Anti-aircraft Regiment

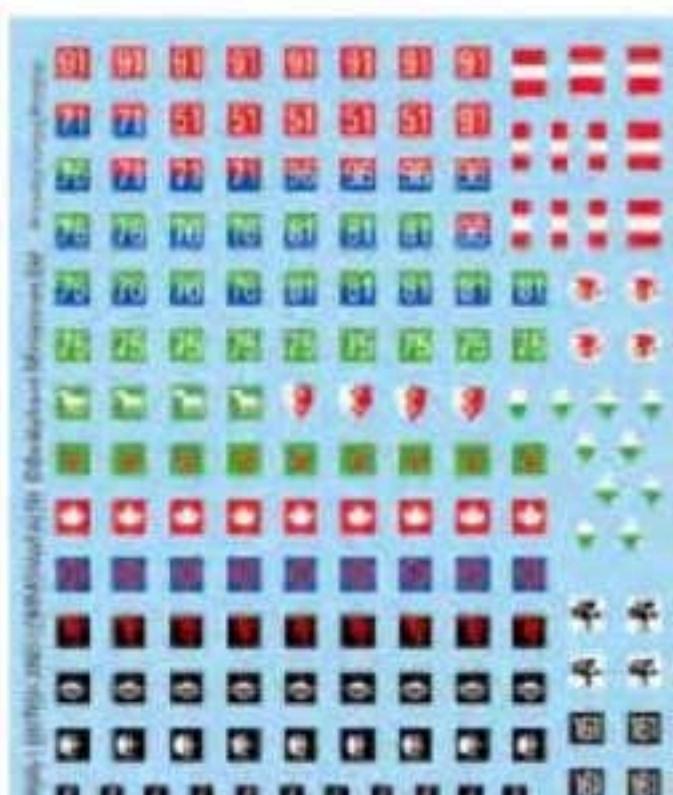
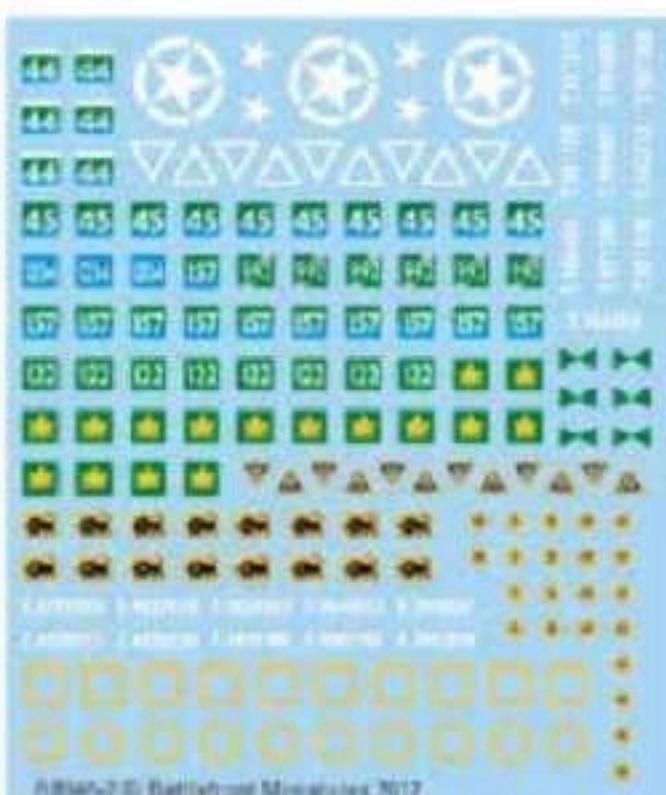
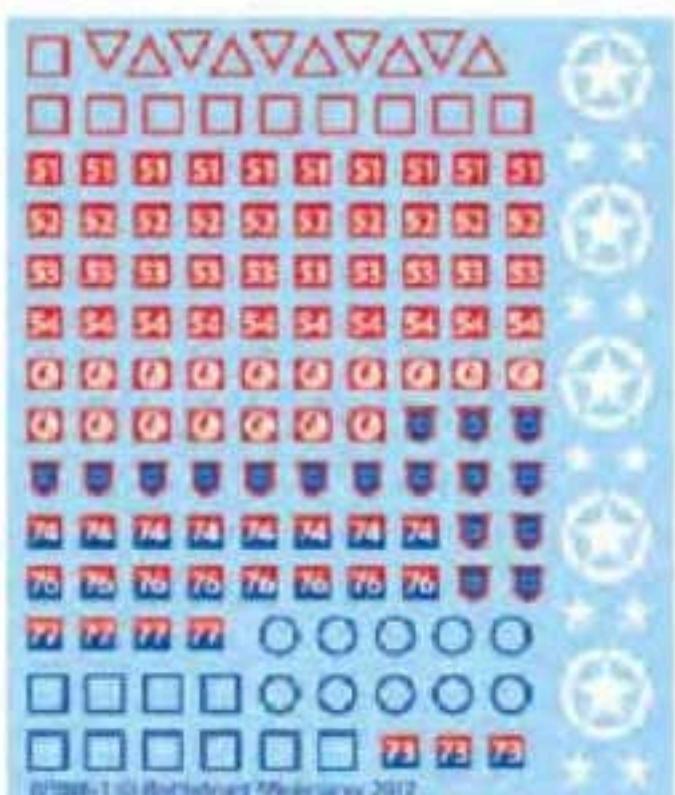


Machine-gun Battalion



Anti-tank Regiment

While they don't cover every possible variation, the *Flames Of War* range of Mid/Late decals certainly provide a lot of variety and allow you to apply markings to a little bit of everything.





BRITISH INFANTRY IN THE DESERT

Helmets & Painted Metal



DARK SAND
847

Uniform



IRAQI SAND
819

Webbing



STONE GREY
884

Flesh

SEE FACES
PAGE 24

Rifles, SMGs, & MGs

SEE INFANTRY WEAPONS
PAGE 25

Socks



KHAKI
988

Boots



BLACK
950



British troops in North Africa wore a uniform consisting of khaki drill shorts or slacks with long-sleeved Aertex shirts.

The light khaki drill fabric was good in the hot desert sun, but was usually insufficient for the cold desert nights.

Webbing equipment was simple raw canvas, not treated with Blanco (the coloured cleaning paste which uniform regulations required for troops in other theatres).

Metal items such as brass buckles were left unpolished to reduce potential glare.

DESERT UNIFORMS AND WEBBING

COLOUR PALETTE



IRAQI SAND

Medium Brush



BASECOAT the uniform with Iraqi Sand, using multiple thin coats if necessary to get an even coverage.

STONE GREY

Small Brush



BASECOAT the webbing gear and rifle slings with Stone Grey.

KHAKI

Medium Brush



BASECOAT the socks with Khaki.

The paler shade of the khaki drill tropical uniform was better suited to desert regions than the heavy brown serge of standard Battledress.

SEPIA WASH

Medium Brush



WASH the figure liberally with watered down Sepia Wash since you are washing over light colours.

IRAQI SAND

Small Brush



HIGHLIGHT the uniform with Iraqi Sand, concentrating on folds and raised details.



BRITISH LATE-WAR INFANTRY

Helmets

RUSSIAN UNIFORM
924

Hessian Strips

US FIELD DRAB
873

Webbing

RUSSIAN UNIFORM
924

Flesh

SEE BASIC OR ADVANCED FACES
PAGE 24

Rifles, SMGs, & MGs

SEE INFANTRY WEAPONS
PAGE 25

Uniform

ENGLISH UNIFORM
921

Boots

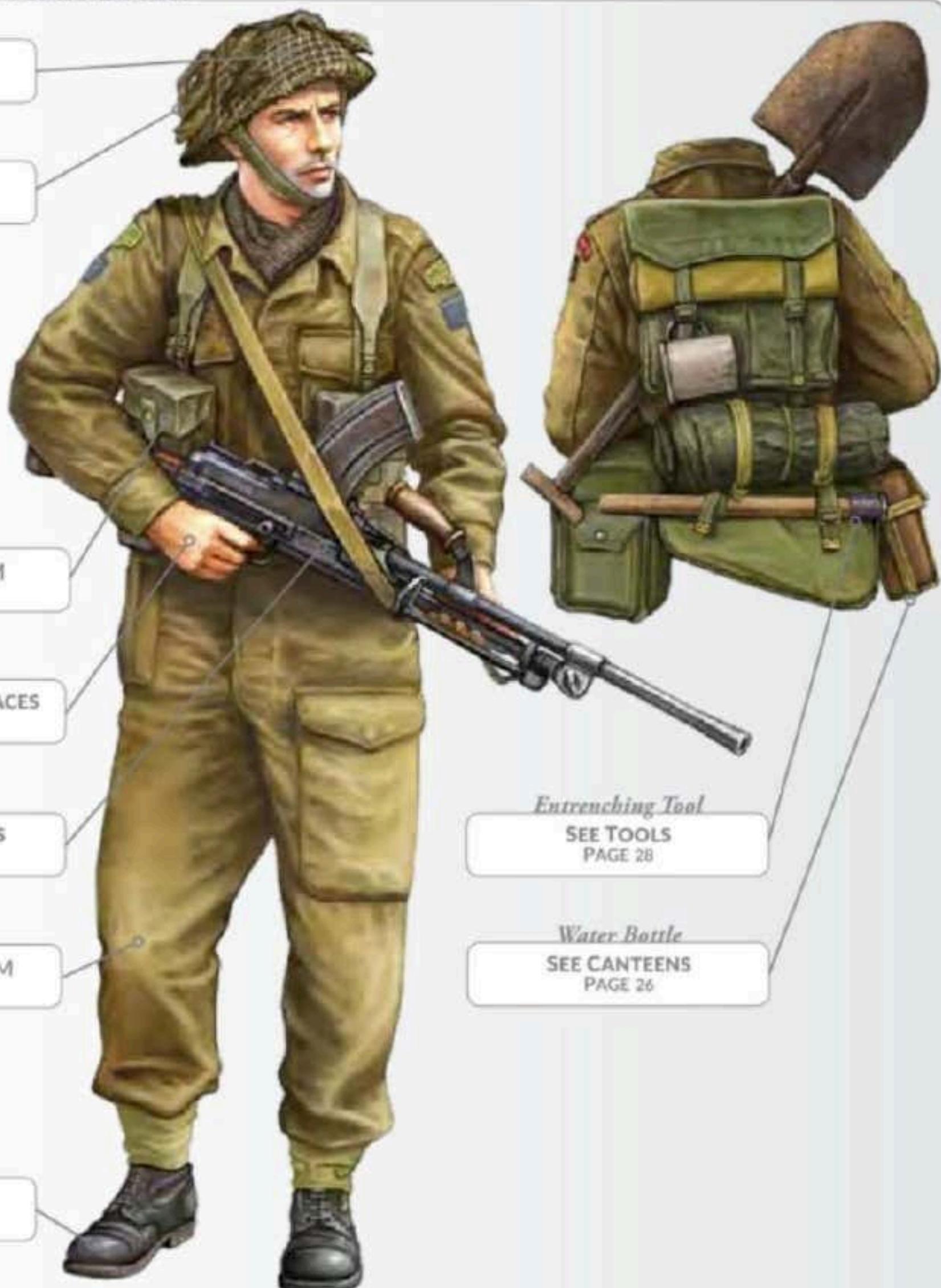
BLACK
950

Entrenching Tool

SEE TOOLS
PAGE 28

Water Bottle

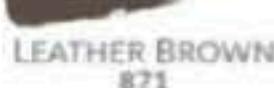
SEE CANTEENS
PAGE 26



BRITISH OFFICERS

COLOUR PALETTE

 BRASS
801

 LEATHER BROWN
871

BRASS

Fine Brush

LEATHER BROWN

Fine Brush



PAINT the officer's uniform the same as
British Battledress (see opposite page).

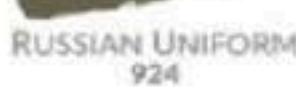
PAINT the cap badge Brass.

PAINT the leather strap Leather Brown.



BRITISH BATTLEDRESS

COLOUR PALETTE



ENGLISH UNIFORM

Large Brush



RUSSIAN UNIFORM

Medium Brush



BLACK WASH

Large Brush



BASECOAT the uniform English Uniform, using two thin coats if necessary to achieve an even coverage.

BASECOAT all webbing equipment with Russian Uniform. Alternatively, Paint it plain Khaki.

WASH the figure liberally with Black Wash. Optionally, add a touch of US Dark Green to give it a greener tone.

ENGLISH UNIFORM

Medium Brush



50% RUSSIAN UNIFORM 50% STONE GREY

Small Brush



50% ENGLISH UNIFORM 50% KHAKI

Small Brush



ACTUAL SIZE

PAINT the uniform with English Uniform, leaving dark shadows in the recessed areas.

HIGHLIGHT the webbing equipment with a mix of Russian Uniform and Stone Grey, or plain Khaki.

HIGHLIGHT raised areas of the uniform for a brighter, higher-contrast look.

HELMETS

COLOUR PALETTE



RUSSIAN UNIFORM

Large Brush



US FIELD DRAB

Medium Brush



BLACK WASH

Large Brush



BASECOAT the helmet with Russian Uniform.

PAINT the bessian camouflage strips with US Field Drab.

WASH the helmet liberally with Black Wash to add shading.

STONE GREY

Large Brush



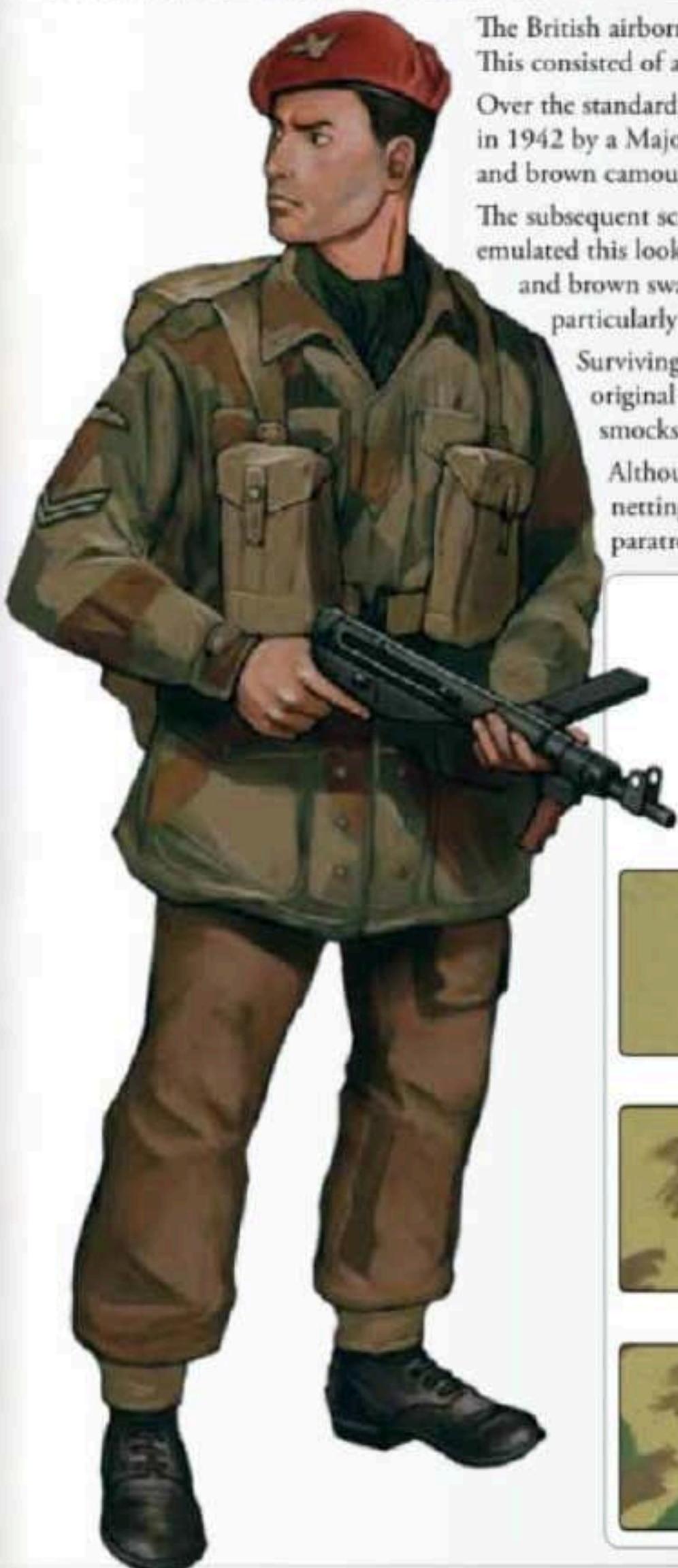
HIGHLIGHT some of the bessian strips with Stone Grey.



Uncovered helmets are easier to paint. Just basecoat with Russian Uniform and wash with Black Wash. Tidy up the shade with Russian Uniform again.



BRITISH PARATROOPERS



The British airborne soldier, like his comrades from the rifle companies, wore the Battledress. This consisted of a short jacket and trousers in a green-brown dark khaki.

Over the standard Battledress they wore their unique Denison camouflage smock, designed in 1942 by a Major Denison. The original 'Airborne Smock Denison Camouflage' had green and brown camouflage colours hand-painted with a large brush.

The subsequent screen-printed pattern which was in use by Operation Market Garden emulated this look, including prominent brush strokes, so if your application of the green and brown swatches is somewhat streaky or patchy, all the better. The dyes used were not particularly colourfast, and faded quite quickly with wear.

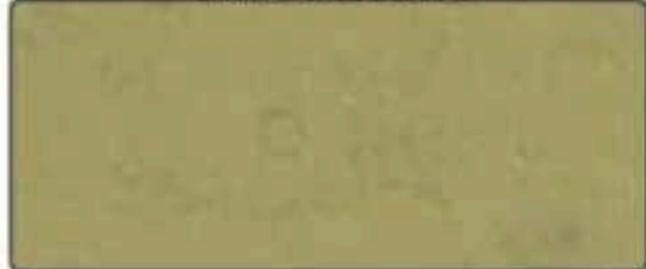
Surviving examples have a very muted, washed-out appearance quite different to their original factory-fresh look. You may want to paint some or all of your paratroops' smocks with faded colours, making it clear that they have seen some use.

Although equipped with their own special design of steel helmet, covered with netting to which strips of coloured camouflage fabric could be tied, some British paratroops still wore their famous red beret into battle.



NEW DENISON
MIDDLESTONE

FADED DENISON
GREEN OCHRE



CHOCOLATE BROWN



FLAT EARTH



REFLECTIVE GREEN



RUSSIAN UNIFORM



AIRBORNE BERETS

COLOUR PALETTE



HULL RED

Large Brush



HULL RED
985

CAVALRY BROWN

Medium Brush



CAVALRY BROWN
982

50% CAVALRY BROWN 50% FLAT RED

Medium Brush



FLAT RED
957

BASECOAT the beret with Hull Red.

HIGHLIGHT with Cavalry Brown,
leaving the shadows Hull Red.

HIGHLIGHT the edge of the beret with a
mix of Cavalry Brown and Flat Red.



AIRBORNE CAMOUFLAGE

COLOUR PALETTE

ENGLISH UNIFORM
921GREEN OCHRE
914RUSSIAN UNIFORM
924FLAT EARTH
983

ENGLISH UNIFORM

Large Brush



GREEN OCHRE

Medium Brush



RUSSIAN UNIFORM

Fine Brush



BASECOAT the smock English Uniform, leaving the deepest recesses Black.

HIGHLIGHT the English Uniform with Green Ochre.

PAINT irregular patches of Russian Uniform, or Reflective Green, covering roughly a quarter of the smock.

FLAT EARTH

Fine Brush



PAINT Flat Earth in irregular patches so that roughly half the smock is covered in camouflage.

GREEN OCHRE

Small Drybrush



DRYBRUSH lightly with Green Ochre to break up the hard camouflage lines while leaving the recesses darker.

Since the last step of painting airborne camouflage smocks is a drybrush, it pays to paint the smocks before the rest of the model, to avoid messing up other colours. Here we've painted the smock as faded Denison.

AIRBORNE HELMETS

COLOUR PALETTE

BRONZE GREEN
897RUSSIAN UNIFORM
924FLAT EARTH
983GREEN OCHRE
914

BRONZE GREEN

Large Brush



BASECOAT the helmet Bronze Green.

RUSSIAN UNIFORM

Small Drybrush



DRYBRUSH the helmet with Russian Uniform.

FLAT EARTH

Medium Brush



PAINT all of the Hessian strips Flat Earth.

GREEN OCHRE

Medium Brush



RANDOMLY repaint half of the Hessian strips Green Ochre.

GREEN OCHRE

Medium Brush



DRYBRUSH the helmet lightly with Green Ochre to soften the camouflage colours.

Like the Denison smocks, you can paint the Hessian strips either new or faded.

SOVIET

"The Red Army and Navy and the whole Soviet people must fight for every inch of Soviet soil, fight to the last drop of blood for our towns and villages... Onward, to victory!"

-Iosef Stalin

With the fascist invader on their doorstep, the Soviet people were conscripted in their millions and thrown forward, often without the best equipment and certainly without a great deal of training. But the Soviet Union and her Red Army were quick to adapt. Mass production and increased combat experience produced a unique fighting force to rival that of the Germans. In *Flames Of War* the Soviet army is plentiful, fielding larger forces than any other nation.





SOVIET ARMOUR
PAGE 88

AIR RECOGNITION
PAGE 89

TOOLS
PAGE 28

MARKINGS
PAGE 91

DECALS
PAGE 30



SOVIET TRACKS
PAGE 89

TANK TRACKS
PAGE 27

INFANTRY WEAPONS
PAGE 25

WEATHER EFFECTS
PAGES 31 & 90





SOVIET ARMOUR

COLOUR PALETTE

CAM. OLIVE GREEN
894BLACK WASH
201REFLECTIVE GREEN
890

CAM. OLIVE GREEN

Large Brush



BASECOAT your tank with *Cam. Olive Green*. Two thin coats are preferable to one thick coat. Alternatively you can use a *Cam. Olive Green* spray can for your undercoat.

BLACK WASH

Large Brush



WASH the tank with *Black Wash*. Try to achieve an even coverage over the whole tank, letting the wash pool in the recesses without building up too much on flat surfaces.

CAM. OLIVE GREEN

Large Brush



TIDY UP the basecoat with *Cam. Olive Green* (see page 15) using a combination of drybrushing and layering, while leaving the recesses dark.

REFLECTIVE GREEN

Small Drybrush



DRYBRUSH the upper surfaces of the vehicle with *Reflective Green*. Don't be afraid if this looks a bit bright as the colour will get toned down with weathering.

The majority of Soviet tanks, vehicles, and artillery were painted a uniform green colour. It can be somewhat monotonous, but it provides a great canvas on which you can really enjoy yourself with weathering effects, giving each tank a unique character, different from its comrades (see page 90).

WINTER WHITEWASH

COLOUR PALETTE

REFLECTIVE GREEN
890WHITE GREY
993WHITE
951

A common form of winter camouflage was whitewash, which could be washed off easily in spring. There are different ways to paint it, depending on how fresh you want the whitewash to look. To show freshly applied whitewash, simply basecoat with White Grey then drybrush with White. Or you may choose to show an older coat of whitewash that has started to wash off.

50% REFLECTIVE GREEN 50% WHITE GREY

Large Brush



BASECOAT the tank with a mix of *Reflective Green* and *White Grey*, to simulate the transparent effect of whitewash that has started to wear off due to rain or heavy use.

WHITE GREY

Medium Brush



LAYER one or two streaky coats of *White Grey* to resemble whitewash camouflage that has been partly washed off by exposure to rain and snow. You don't need to be neat.

REFLECTIVE GREEN

Medium Brush



STIPPLE chips and patches where the whitewash has completely worn off in high-use areas, using *Reflective Green*. Again, there is no need to worry about being neat.

WHITE

Fine Brush



OPTIONALLY add touches of *White* to intensify the whitewash effect in some places, particularly on raised details and edges which could use an extra highlight.



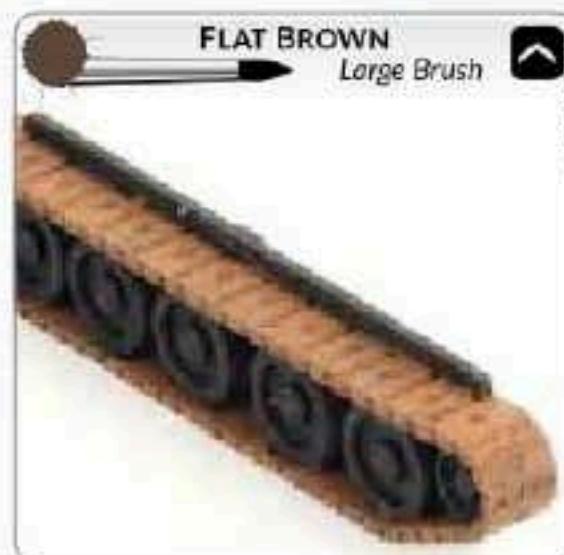
SOVIET TRACKS

COLOUR PALETTE

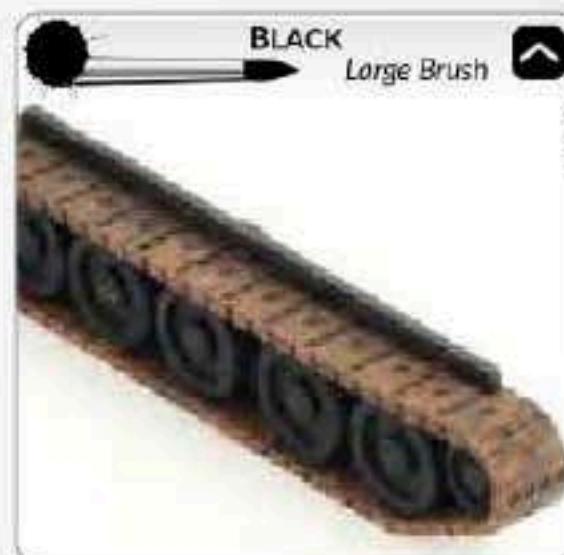


Soviet tanks are usually a single colour, and a little extra dirt and grime is a great way to give them added character.

Spending more time on Soviet tracks to add more dirt, grime and depth of colour than the basic Tank Tracks guide (see page 29) is a good place to start.



BASECOAT the track-links with Flat Brown, carefully avoiding the rubber on the road wheels.



WASH the track links with Black heavily thinned with water. You could substitute Black Wash.



DRYBRUSH the tracks with Oily Steel. Make this drybrush quite heavy, as it will be toned down in the next step.



WASH the tracks with Sepia Wash to create represent grime and grease.



LIGHTLY DRYBRUSH the edge of the tracks with Oily Steel again, to accentuate the track edges.



ATTACH the tracks to the tank and tidy up the tyres with Black. Paint the wheels the same way as the armour.

AIR RECOGNITION MARKINGS

COLOUR PALETTE



In the late stages of the war, when the Red Army enjoyed air superiority, Soviet tankers painted large stripes around or on top of their turrets as air recognition markings to avoid friendly fire.

These are not too difficult to paint, but add a lot of visual interest to your tanks.



PENCIL IN lines for your markings. Using low-tack masking tape as a guide will help you get a straight line. Align the tape to the top and bottom edges of the decal.



'UNDER-PAINT' (i.e. basecoat) the area for the air recognition marking with White Grey. This will make painting the White in the next step easier.



LAYER a coat of White over the top of the White Grey. Feel free to add a few messy paint drips to give each tank some individuality.



WASH a very thinned-down glaze of Ger. Cam. Black Brown over the air recognition marking and the decal. This will tone down the White and help blend it into the tank.



WEATHERING SOVIET GREEN

COLOUR PALETTE



GER. CAM. BRIGHT GREEN
Medium Brush



GER. CAM. BLACK BROWN
Fine Brush



PAINT chips and scratches with a fine brush, concentrating on edges and areas of heavy use.

GER. CAM. BLACK BROWN
Fine Brush



KHAKI GREY
Fine Brush



PAINT vertical streaks with very thinned down Black Brown, starting at corrosion points like paint chips and weld lines.

GER. CAM. BLACK BROWN
Fine Brush



KHAKI GREY
Fine Brush



TARGET WASH recesses with Black Brown or Flat Brown to exaggerate built-up dirt that has collected in the corners.

TARGET WASH weld lines with Khaki Grey or Light Brown. Be careful not to go too overboard with this; 'less is more'.

With their large numbers of tanks, all in the same uninterrupted green, Soviet armies can easily become repetitive and monotonous - both to look at and to paint.

Decals and air recognition markings will help a lot. Another way to make them really stand out is to go to town with weathering.

Here are a few tips for adding depth to Soviet armour. Be careful to build the weathering up carefully, to avoid overdoing it.

SOVIET TANK CREW

COLOUR PALETTE



You have a lot of options when it comes to painting Soviet tank crew. Their overalls can be dark blue (below), the same khaki colour as Soviet infantry uniforms (see page 93), or black (see Painting Black on page 27). The helmet can be canvas (below), leather (see Brown Leather on page 26), or black.

KHAKI GREY
Large Brush



LUFTWAFFE UNIFORM
Large Brush

BLACK WASH
Large Brush



50% KHAKI GREY
50% STONE GREY
Medium Brush



BASECOAT the uniform Luftwaffe Uniform and the helmet Khaki Grey.

WASH the helmet and overalls with Black Wash. You can substitute Black heavily thinned with water.

HIGHLIGHT the helmets with a mix of Khaki Grey and Stone Grey. Tidy up the overalls with Luftwaffe Uniform.



SOVIET MARKINGS

While there were standard tank marking and numbering systems in all the other major armies, there was no such system in the Red Army. During World War II regimental commanders were responsible for the style and meaning of the numbering system in use by their regiments. This was done during WWII so as to utterly fool enemy intelligence—if you don't know what the numbers mean, the enemy sure as hell don't! Basically, with a few rules, anything goes!

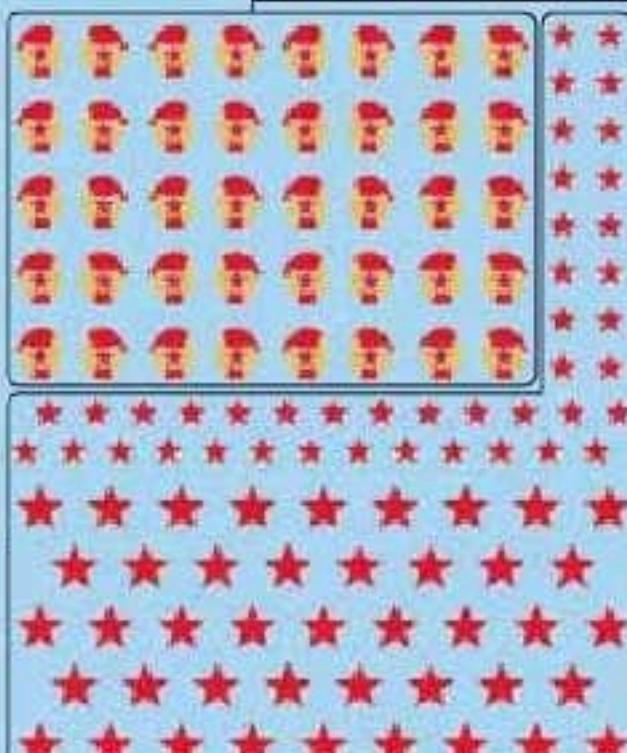
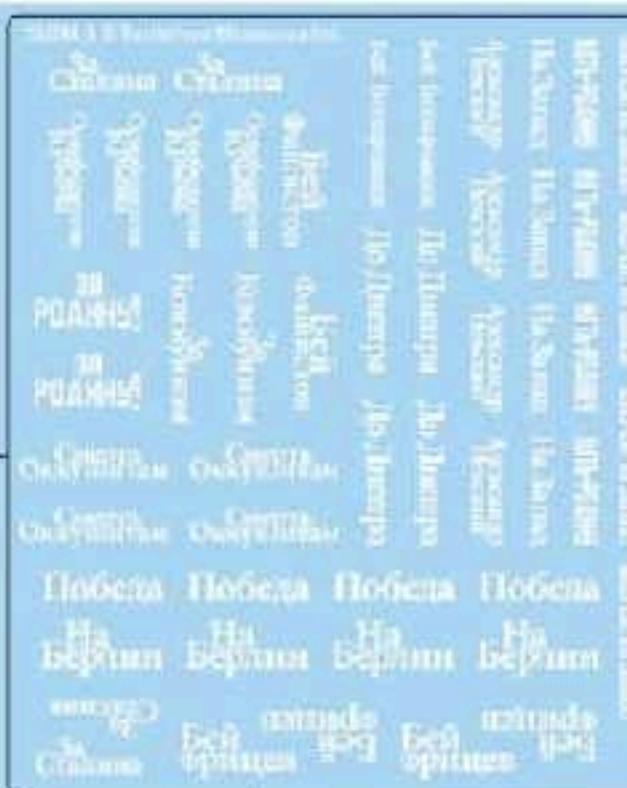
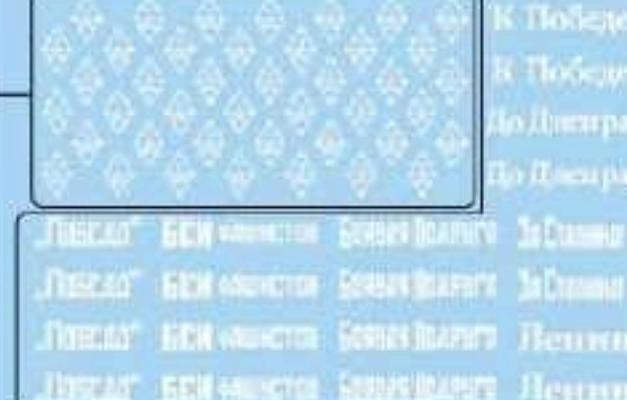
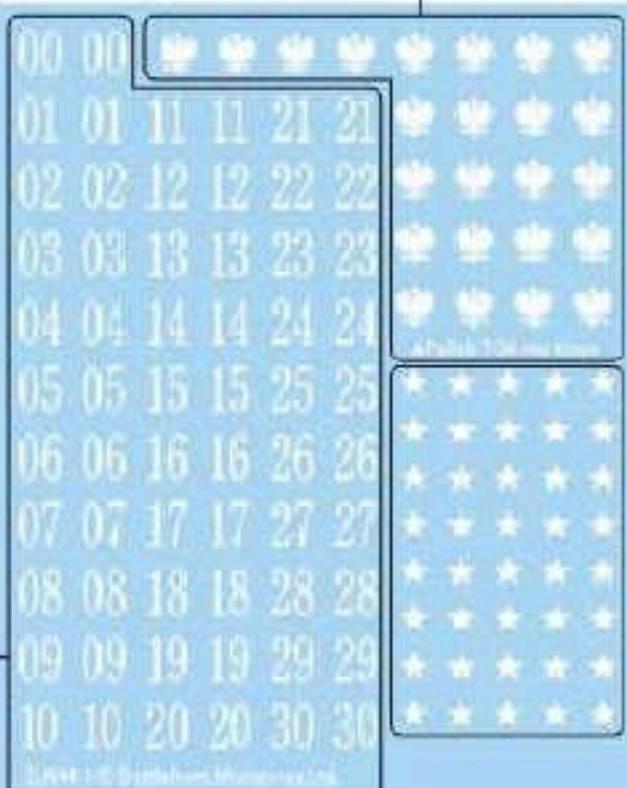
The Soviet Union raised a tank regiment from Polish Volunteers, who painted Polish Eagles on the turrets of their tanks.

Tank numbers can range from one- to four-digit numbers, or include letters and symbols.

They appear on the decal sheet in two different styles. The four-digit numbers can be cut down into two- or three-digit numbers as well.

The most common RKKA tactical markings were a rhomboid or triangle with numbers inside.

Some of the decal sheets included in *Flames Of War* Soviet tank boxes have more varieties of tactical markings.



One of the markings that really makes Soviet vehicles stand out are slogans.

There is no right or wrong place to put slogans on a vehicle; any large flat surface is fair game for a slogan!

Some tank units were awarded the Guards honour. Often these units would paint the Guard insignia on their tanks.

As a general rule, Red stars were more commonly used on Lend-lease vehicles than on Soviet-built equipment, which tended to have white stars on them (if they had stars at all).

Red stars can also be used on captured German equipment.

However, like everything in the Soviet army, anything is possible.

T-34 (85mm)



IS-2 (Late 122mm)



Lend-lease 'Emba', M4A2 Sherman (7.5cm)



Captured Panther (7.5cm)





SOVIET INFANTRY



CANVAS WEBBING EQUIPMENT

COLOUR PALETTE <ul style="list-style-type: none"> US FIELD DRAB: 873 SEPIA WASH: 200 STONE GREY: 884 	US FIELD DRAB Medium Brush 	SEPIA WASH Medium Brush 	STONE GREY Medium Brush  ACTUAL SIZE 
--	--	--	--

BASECOAT the satchel with US Field Drab.

WASH with Sepia Wash.

HIGHLIGHT with Stone Grey.



SOVIET UNIFORMS

SUMMER UNIFORMS



KHAKI GREY
880



GREEN GREY
886



SEPIA WASH
200



STONE GREY
884



BASECOAT the uniform Khaki Grey, using two thin coats if necessary to achieve an even coverage.



BASECOAT all webbing equipment with Green Grey.



WASH the figure liberally with Sepia Wash to add depth to the uniform.

WINTER UNIFORMS



RUSSIAN UNIFORM
924



KHAKI
988



TIDY UP the uniform with Khaki Grey, leaving dark shadows in the recessed areas.



PAINT the canvas areas Stone Grey.



HIGHLIGHT raised areas of the uniform for a brighter, higher-contrast look.

KOMMISSARS & PIPING

COLOUR PALETTE



LUFTWAFFE UNIFORM
816



CAVALRY BROWN
982



BLACK WASH
201



ROYAL BLUE
809



FLAT RED
957



BASECOAT the pants and peaked cap Luftwaffe Uniform. For non kommissar officers caps paint them Khaki Grey.



PAINT a Cavalry Brown band around the base of the peaked cap.



WASH the pants and cap with Black Wash, to add shading and hide any untidiness around the red band.



HIGHLIGHT the pants and the top of the peaked cap with a mix of Luftwaffe Blue and Royal Blue.



PAINT very thin lines around the edge of the cap and down the legs of the pants.



Red Army troops from 1944 onwards had large shoulderboards. Paint them like German Waffenfarbe on page 64, using Dark Red and Chocolate Brown.

Kommissars are unique to the Red Army, and give you a welcome chance to add a dash of bright colour to an otherwise fairly drab force.



ASSAULT SAPPERS AND SCOUTS



The 'Amoeba' pattern camouflage was the first mass-produced Soviet camouflage uniform. It was printed with large reddish-brown amoeba shapes on a light green or khaki background. Coloration of the pattern varied depending on the factory that produced it, with variants of the green summer version featuring darker brown, dark green or black amoeba shapes.

Most Soviet armies will not include more than a single platoon of scouts in Amoeba camouflage, so they are a manageable opportunity to try painting camouflage at this scale.



AMOEBA PATTERN CAMOUFLAGE

COLOUR PALETTE



YELLOW GREEN
881



ENGLISH UNIFORM*
921



GER. CAM. DARK GREEN
979



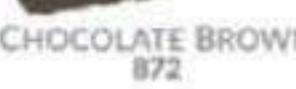
SEPIA WASH
200



GREEN GREY
886



STONE GREY
884



CHOCOLATE BROWN
872

YELLOW GREEN
Large Brush



BASECOAT the uniform Yellow Green.

GER. CAM. DARK GREEN
Large Brush



WASH the figure liberally with thinned down German Camo Dark Green to add shading.

YELLOW GREEN
Medium Brush



TIDY UP the uniform with Yellow Green, leaving dark shadows in the recessed areas.

50% YELLOW GREEN
50% GREEN GREY
Small Brush



HIGHLIGHT raised areas of the uniform with a mix of Yellow Green and Green Grey.

CHOCOLATE BROWN
Small Brush



PAINT splodges of Chocolate Brown randomly over the uniform, covering roughly $\frac{1}{4}$ of the uniform.

ACTUAL SIZE



For the khaki camouflage, follow the same steps as the green substituting the colours marked *.



WINTER INFANTRY



Like the basic uniform, the colours of Soviet greatcoats varied considerably. Aside from differences between factories, a large number of wool coats were supplied by the Western Allies under the Lend-lease programme.

SOVIET FLAGS

COLOUR PALETTE

HULL RED
985

CAVALRY BROWN
982

FLAT RED
957

Flags are one of the focal points of a Soviet force. Here is a basic guide for the colours to use for your flag. For a more even colour transition you could add steps in between with 50/50 mixes of the colours either side, or use a layering technique (see page 13).

HULL RED
Fine Brush

BASECOAT the flag Hull Red.

CAVALRY BROWN
Fine Brush

HIGHLIGHT with Cavalry Brown, either by heavy drybrushing or layering.

FLAT RED
Fine Brush

HIGHLIGHT the flag again with Flat Red.

GREATCOATS

COLOUR PALETTE

MEDIUM GREY
987

GER. CAM. BLACK BROWN
822

STONE GREY
884

FLAT EARTH
983

CAVALRY BROWN
982

MEDIUM GREY
Large Brush

GER. CAM. BLACK BROWN
Large Brush

MEDIUM GREY
Medium Brush

BASECOAT the uniform Medium Grey, using two thin coats if necessary to achieve an even coverage.

WASH the figure liberally with thinned down Ger. Cam. Black Brown.

TIDY UP the uniform with Medium Grey, leaving dark shadows in the recessed areas.

**50% MEDIUM GREY
50% STONE GREY**
Fine Brush

FLAT EARTH
Small Drybrush

CAVALRY BROWN
Fine Brush

ACTUAL SIZE

HIGHLIGHT raised areas of the uniform with a mix of Medium Grey and Stone Grey for higher-contrast.

DRYBRUSH the bottom of the greatcoat with Flat Earth to represent mud and dirt.

PAINT rank insignia on the corners of the collar tabs Cavalry Brown. You could also substitute with Flat Red.

Larger uniform items like greatcoats are a great opportunity to practise shading and highlighting over a nice large area.

ITALIAN

"The German soldier has impressed the world, however the Italian Bersagliere soldier has impressed the German soldier."

-Fieldmarshall Erwin Rommel

The Italians learned about modern warfare the hard way in 1940. Now they are back, showing the world what the Italian soldier can do. Fighting under the famous 'Desert Fox', General Rommel, they form a crucial part of the Italian-German Panzer Army. Tough, determined, skilled, and aggressive veterans, the Italians broke through the British Gazala Line to save the trapped German Afrika Korps, held the line at El Alamein, and opened the way at Kasserine Pass, before holding up the American offensive at El Guettar. Fight or die for the new Roman Empire!



ITALIAN ARMOUR
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PAGE 99



ITALIAN ARMOUR

COLOUR PALETTE



GREEN OCHRE
914



SEPIA WASH
200



IRAQI SAND
819

GREEN OCHRE

Large Brush



BASECOAT your tank with Green Ochre. Two thin coats are better than one thick coat.

SEPIA WASH

Large Brush



WASH the tank with Sepia Wash. Try to achieve an even coverage over the whole tank, letting the wash pool in the recesses. Add a bit of Black Wash if you want a slightly darker finish.

GREEN OCHRE

Medium Brush



DRYBRUSH the wash with Green Ochre using a combination of drybrushing and layering.

IRAQI SAND

Small Drybrush



DRYBRUSH the tank with Iraqi Sand, concentrating on edges, raised details, and upper surfaces to add highlights.

From February 1941 Italian tanks sent to the desert were factory painted a sandy colour. Prior to this they were painted in a dark olive colour, German Fieldgrey, and vehicles serving in the Balkans or Russia would still be painted in this colour.



CAMOUFLAGE & WEATHERED PAINT

COLOUR PALETTE



GREEN OCHRE
914



GERMAN
FIELD GREY
WWII
830



SEPIA WASH
200



IRAQI SAND
819



BLACK GREY
862



GER. CAM.
BLACK BROWN
822

While most of the Italian vehicles in the desert were painted Green Ochre, there are plenty of photos of Italian tanks sporting camouflage, either hand-applied in large hard-edged patches as shown here, or as small spots applied with an airbrush.

GREEN OCHRE
Large Brush



BASECOAT your tank with Green Ochre.

GERMAN FIELD GREY
Large Brush



PAINT patches of German Field Grey over the Green Ochre, aim for approximately 50% coverage over the Green Ochre.

SEPIA WASH
Large Brush



WASH the tank with Sepia Wash. Try to achieve an even coverage over the whole tank, again, adding a bit of Black Wash for a darker wash if you like.

GREEN OCHRE
GERMAN FIELD GREY
Medium Brush



TIDY UP the wash with Green Ochre and German Field Grey using a combination of drybrushing and layering.

IRAQI SAND
Small Drybrush



DRYBRUSH the tank with Iraqi Sand, concentrating on edges, raised details, and upper surfaces to add highlights. Add small spots and scratches of Iraqi Sand, concentrating on areas of high wear and heavy use.

BLACK GREY
OR
GER. CAM. BLACK BROWN
Small Brush



FILL IN the centre of the chips and scratches with Black Grey, leaving the lighter edges showing. Try to keep chips small for a realistic effect.

You could use Ger. Cam. Black Brown to fill in the centre of the scratches instead, as metal starts to turn brown as soon as its exposed to air. Look at old trucks the next time you are driving.

ITALIAN MARKINGS

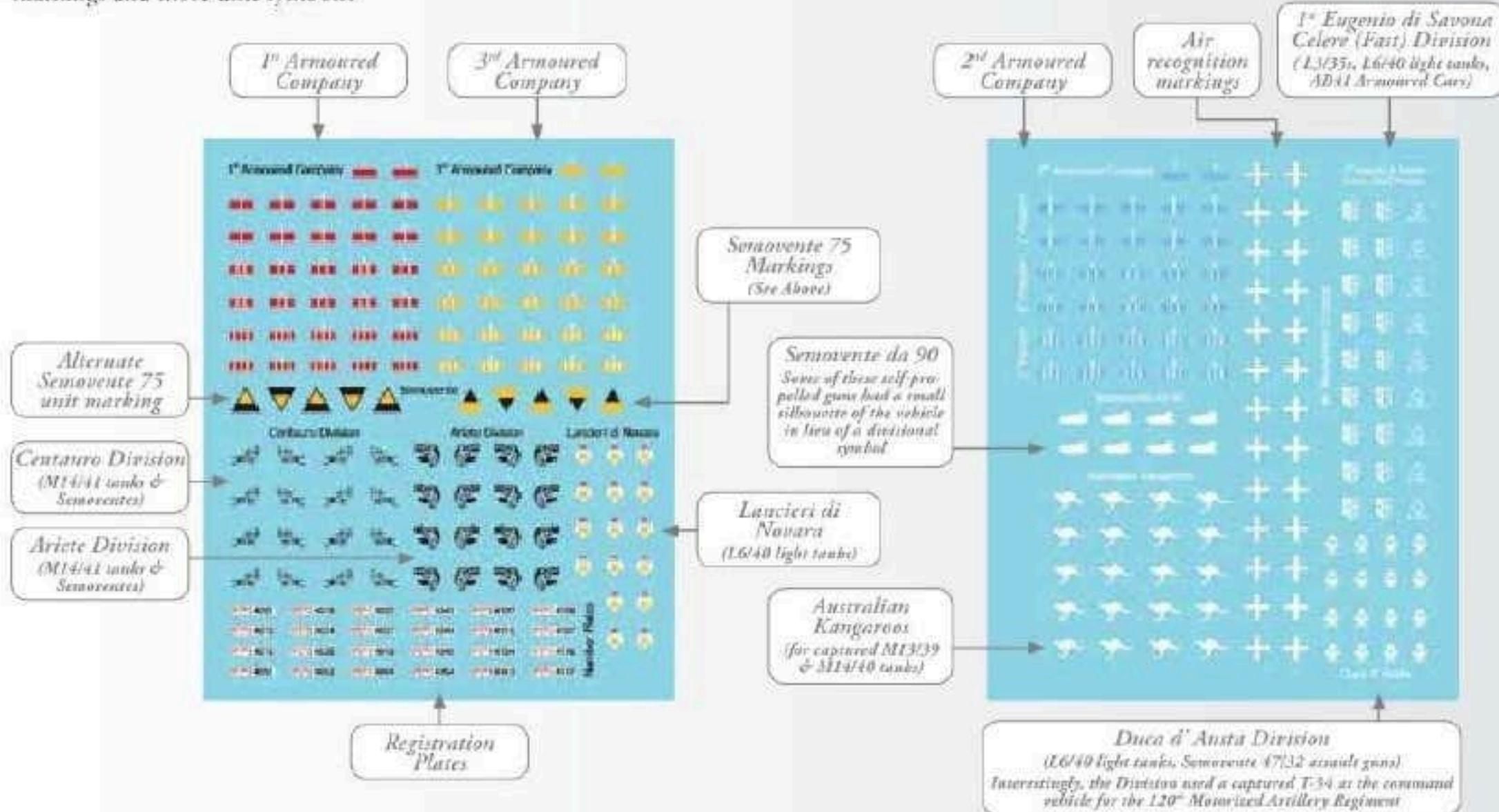
Tactical markings are an excellent way of adding visual and historical interest to your models. Most Italian tanks feature an identifying number on the side of the hull or turret, license plates and divisional symbols. You can find more detailed information on Italian markings on the *Flames Of War* website.



Most unit boxes come with the decal sheet shown here. More decal options can be found on IT940 Italian Decal Sheet detailed Below.

IT940 ITALIAN DECALS

While the Italian Platoon boxes come with a good selection of decals, the Italian decal pack gives you a lot more options, like blue platoon markings and more unit symbols.



ITALIAN INFANTRY



In the desert the Bersaglieri were issued with a light cotton tropical uniform. It was a yellowy tan colour in hue and is often described as Light Khaki. Trousers and Tunics were the same colour, though most troops retained their original Green-Grey puttees.

Helmets were painted the same sand colour as the tanks and vehicles, and were adorned with their traditional Cockerel feathers.

Some soldiers continued to wear green helmets, so you could paint some of the helmets German Fieldgrey for a bit of variety.

Often British shirts and Trousers were worn from captured stocks. These were in the lighter British Khaki Drill, *Iraqi Sand* (364), which make a good contrast on your desert uniforms.

DESERT UNIFORMS AND WEBBING

COLOUR PALETTE	DESKTOP	DESKTOP	DESKTOP
DESERT YELLOW 977	DESERT YELLOW Medium Brush	YELLOW GREEN Small Brush	OLIVE GREY Small Brush
YELLOW GREEN 881	DESERT YELLOW Medium Brush	YELLOW GREEN Small Brush	OLIVE GREY Small Brush
OLIVE GREY 888	DESERT YELLOW Medium Brush	YELLOW GREEN Small Brush	OLIVE GREY Small Brush
SEPIA WASH 200	SEPIA WASH Medium Brush	DESERT YELLOW YELLOW GREEN OLIVE GREY Small Brush	IRAQI SAND Large Brush
IRAQI SAND 819	SEPIA WASH Medium Brush	DESERT YELLOW YELLOW GREEN OLIVE GREY Small Brush	IRAQI SAND Large Brush

BASECOAT the uniform with Desert Yellow, using two thin coats if necessary for an even coverage.

PAINT the canvas webbing gear Yellow Green.

PAINT the Puttees Olive Grey.

WASH the figure with Sepia Wash to add depth to the model.

HIGHLIGHT raised areas of the uniform, webbing and Puttees with their same base colour.

DRYBRUSH the model lightly with Iraqi Sand. Apply a heavier drybrush around the bottom of the model.

EASTERN FRONT UNIFORMS AND WEBBING

COLOUR PALETTE

OLIVE GREY
888BLACK GREY
862BLACK WASH
201STONE GREY
884

Use these colours paint your Italians for the Eastern Front or the Balkans. You can paint the webbing grey or yellow green depending on your preference.

OLIVE GREY

Medium Brush



BASECOAT the uniform with Olive Grey, using two thin coats if necessary for an even coverage.

BLACK GREY

Small Brush



PAINT the canvas webbing gear Black Grey.

BLACK WASH

Small Brush



WASH the figure with Black Wash to add depth to the model.

OLIVE GREY

Medium Brush



HIGHLIGHT raised areas of the uniform and webbing with Olive Grey

BLACK GREY

Small Brush



HIGHLIGHT raised areas of the uniform and webbing with Olive Grey

**75% OLIVE GREY
25% STONE GREY**

Small Brush



HIGHLIGHT the uniform with a mix of Olive Grey and Stone Grey for added depth.

ITALIAN VEHICLE GALLERY



Renault (37mm)



Dowunque Truck



Semovente (90mm)



Lancia Truck



Lancia (90mm)

World War III



Based on the book written by Harold Coyle in 1987, World War III: Team Yankee brings the conflict that simmered throughout the Cold War to life. You will command your troops in miniature on a realistic battlefield.

In Team Yankee, a heavy combat team of M1 Abrams tanks and M113 armoured personnel carriers faces a Soviet invasion of West Germany. Outnumbered and outgunned, Captain Sean Bannon and his men will have to fight hard and they'll have to fight smart if they are going to survive.

Lt. Colonel Yuri Potecknov's motor rifle battalion is preparing to execute its mission in the scientific manner that he had been taught at the Frunze Military Academy and used in Afghanistan. Victory today will bring the world proletarian revolution that much closer.



WORLD WAR III TEAM YANKEE

PLAN YOUR FORCE

There are two ways to go about collecting a *World War III* army: by looking through Army books such as *Red Thunder*, *Leopard*, or *Stripes* and finding a list that you think is cool, or by simply collecting the models that you like and then finding an Intelligence Briefing they fit into.

The most important thing is to have a clear goal to help inspire you and give you the motivation to finish your project.

There are a lot of things to consider when thinking about starting a *World War III* army. Check out our website, www.Team-Yankee.com, for more information on the types of forces you can choose from.

Collecting a *World War III: Team Yankee* army may seem daunting before you begin, but you will quickly discover how much fun it is. In fact, many find that they cannot stop at just one army or force, and usually end up with two, three or more forces at various stages of completion. Some people require patience and motivation to see an army through to the end. And many painters find themselves easily distracted by new miniatures for completely different forces all the time. But that is half the fun!



PLATOONS



Like *Flames Of War*, in *World War III: Team Yankee*, the basic unit is a platoon. Each platoon card indicates the required squads and teams you must have to make that unit.

World War III: Team Yankee box sets are designed around the units in the books, and come with all the options needed to make a platoon, and come with all the cards you need to field the miniatures.

NOT SURE WHERE TO START? TRY HAMMERFALL!

Hammerfall contains everything you need to start collecting and playing *World War III: Team Yankee*, including:

2x American M1 Abrams tanks,

3x Soviet T-64 tanks,

A 120 page full colour rulebook,

Dice,

Cardboard Terrain, and

Unit cards.

Painting and playing games with *Hammerfall* miniatures should help you decide where to go next in the *Team Yankee* hobby, and give you a good base to start from.





UNITED STATES

Bannon snapped his head to the left. There was no need to use a map. There was only one place where the Russians would be, and that was on the hill 2,200 meters away. All the training, planning, and preparation was over. Team Yankee was about to learn if the Team's seventy-nine men and twenty-five million dollars worth of equipment could do what they were supposed to do; close with and destroy the enemy by fire, manoeuvre, and shock effect.

The events in the background of *World War III: Team Yankee* are based on the novel by HW Coyle, a soldier serving with the US Army in Europe in the 1980s. Team Yankee is about one company, or team, called Team Yankee, a tank-heavy combat team under the command of Captain Sean Bannon in West Germany. At the start of the story the Team consists of eighty four men and a mix of modern, high-tech weaponry as well as tried and true, if somewhat old, equipment. Although the Team is a tank-heavy company team, it is attached to 3rd Battalion, 78th Infantry (Mechanized), a mechanised infantry battalion.





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US CAMOUFLAGE GALLERY

The US Armour painting guide on the next page gives you an example of the Winter MERDC camouflage that we have painted our studio armies in, but here are some examples of alternate MERDC colour schemes and the MAASTER camouflage scheme that was the predecessor of MERDC, that was still in use in some units.



M163
(MAASTER)



M1 ABRAMS
(MERDC)



SGT YORK
(MERDC)



M60
(MERDC)



MERDC CAMOUFLAGE

COLOUR PALETTE



US DARK GREEN
893



BLACK WASH
201



US FIELD DRAB
873



DARK SAND
847



BLACK
950

In the late 1970s, the US Army adopted the MERDC camouflage system (named for the Mobility Equipment Research and Development Centre that developed it).

This sophisticated camouflage scheme could be varied for different environments.

The US forces in NATO normally used the Winter scheme shown on this page.

As MERDC was being phased out in favour of a new NATO standard camouflage scheme, new equipment was sometimes left in uncamouflaged green. So, if you don't want to tackle MERDC just yet, you can skip the fancy camouflage stages.

SUMMER MERDC



REFLECTIVE GREEN
890



LUFTWAFFE CAM. GREEN
823

If you want to paint your force in the less-used summer MERDC scheme, simply replace the US Field Drab with Reflective Green or Luftwaffe Camo Green.

US DARK GREEN

Large Brush



BLACK WASH

Large Brush



BASECOAT your tank with US Dark Green. Two thin coats are preferable to one thick coat. Alternatively you can use a US Dark Green spray can for your undercoat.

US DARK GREEN

Large Brush



TIDY UP with US Dark Green using drybrushing and layering, while leaving the recesses dark. Skip the next three steps if you don't want to paint the full MERDC scheme.

US FIELD DRAB

Medium Brush



OUTLINE the camouflage pattern with US Field Drab, then fill in the outlines. It's a good idea to look at historical photographs for guidance.

DARK SAND

Medium Brush



EDGE the US Field Drab camouflage with short branches of Dark Sand. These lines surround about a third of the edge of the camouflage colour.

BLACK

Fine Brush



EDGE the camouflage patterns with 'gull wing' of Black. These patterns also surround about a third of the edge of the brown patches.

DARK SAND

Drybrush



DRYBRUSH the tank with Dark Sand concentrating on edges, raised details, and upper surfaces to add highlight.

BLACK WASH

Fine Brush



WASH the details with Black Wash to add definition to the camouflage pattern.



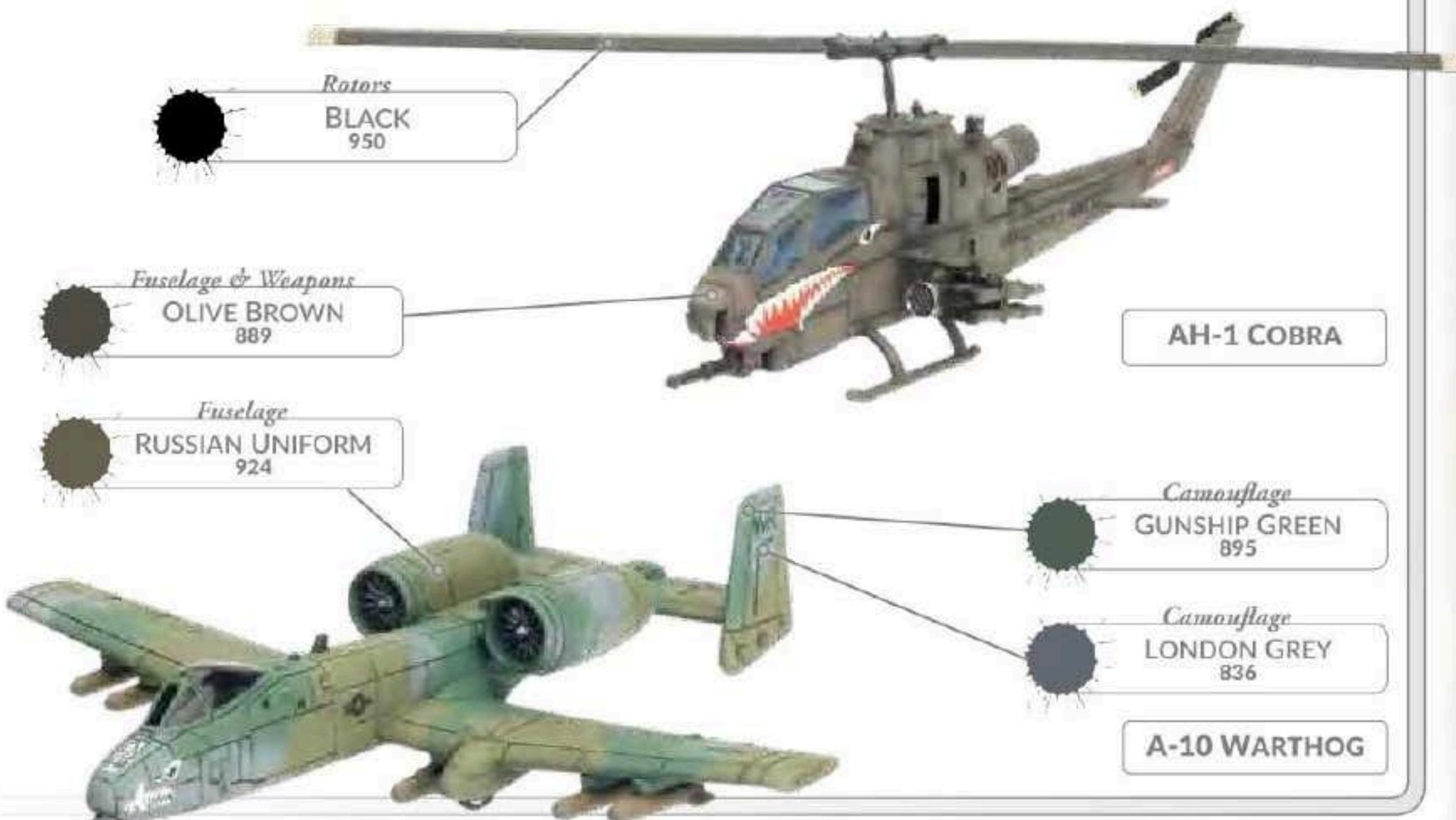
US TANK MARKINGS

Tactical markings are an excellent way of adding visual and historical interest to your models. We have based the US markings off the call-signs from the Team Yankee novel, and ever-popular chevrons and kill ring markings.



World War III: Team Yankee US boxes come with either black or white decals, but since one sheet covers an entire company, over the course of several boxes you are likely to get at least one of each.

US AIRCRAFT





PAINTING US INFANTRY



EUROPEAN CAMOUFLAGE UNIFORMS

COLOUR PALETTE

- REFLECTIVE GREEN 890
- BLACK WASH 201
- FLAT EARTH 983
- KHAKI 988
- BLACK 950

REFLECTIVE GREEN Large Brush

BLACK WASH Large Brush

FLAT EARTH Fine Brush

CAMOUFLAGE the uniform with Reflective Green, using two thin coats if necessary to achieve an even coverage.

WASH the figure liberally with Black Wash to add depth to the uniform.

CAMOUFLAGE with small patches of Flat Earth covering about one-third of the uniform.

KHAKI Fine Brush

BLACK Fine Brush

BLACK WASH Fine Brush

CAMOUFLAGE with small patches of Khaki covering about half of the remaining Reflective Green.

CAMOUFLAGE with fine lines of Black across the Flat Earth and Khaki.

PINWASH some of the deep recesses with Black Wash to add more depth.

US soldiers wore camouflaged BDU (Battle Dress Uniform) in the standard woodland camouflage pattern.



DESERT CAMOUFLAGE UNIFORMS

COLOUR PALETTE

GER. CAM. BEIGE
821FLAT BROWN
984LIGHT BROWN
929BLACK WASH
201BLACK
950

WHITE
951

GER. CAM. BEIGE

Large Brush



FLAT BROWN

Large Brush



LIGHT BROWN

Fine Brush



BASECOAT the uniform with *Ger. Cam. Beige*, using two thin coats if necessary to achieve an even coverage.

CAMOUFLAGE with small patches of *Flat Brown* covering about one-quarter of the uniform.

BLACK WASH

Large Brush



WASH with a thinned down *Black Wash* to blend the camouflage patches together.

BLACK WHITE

Fine Brush



CAMOUFLAGE with small spots of *Black and White*.

In the Desert, US troops had a distinctive 'chocolate chip' camouflage uniform.

WEBBING EQUIPMENT

COLOUR PALETTE

OLIVE BROWN
889BLACK WASH
201

OLIVE BROWN

Medium Brush



BASECOAT the webbing with *Olive Brown*.

BLACK WASH

Fine Brush



WASH the details carefully with *Black Wash*.

OLIVE BROWN

Fine Brush



TIDY UP with another layer of *Olive Brown*.

AFRICAN-AMERICAN SKIN

COLOUR PALETTE

GER. CAM. BLACK BROWN
822BLACK WASH
201LEATHER BROWN
871

GER. CAM. BLACK BROWN

Medium Brush



BASECOAT the skin with *Ger. Cam. Black Brown*.

BLACK WASH

Fine Brush



WASH with *Black Wash*.

LEATHER BROWN

Fine Brush



HIGHLIGHT with a layer of *Leather Brown*.



BRITISH & COMMONWEALTH

"We did not fight two World Wars to defend Europe from dictatorship and oppression just to hand it over to the next tyrant bent on world dominance!"

The British Army had prepared for war with its usual professionalism. Now, as the Soviet Army flooded across the border into West Germany, it was ready and waiting. Scorpion and Scimitar light tanks skirmished with the Soviet forward detachments as the Chieftain armoured regiments waited. The infantry held the towns and woods, forcing the enemy into killing zones. If anything broke through, the airmobile troops in their Lynx helicopters would hold them. The British Army is ready.





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BAOR CAMOUFLAGE

COLOUR PALETTE



BRONZE GREEN

Large Brush



BLACK GREY

Large Brush



BASECOAT your tank with *Bronze Green*. Two thin coats are preferable to one thick coat. Alternatively you can use a *Bronze Green* spray can for your undercoat.

FLAT BROWN

Large Brush



BLACK WASH

Large Brush



BASECOAT the wheels and hull surfaces with *Bronze Green* and paint the tracks *Flat Brown*.

WASH the tracks with *Black Wash* and paint the road wheels and track pads with *Black Grey*.

BLACK WASH

Large Brush



BRONZE GREEN BLACK GREY

Medium Brush



WASH the tank with *Black Wash*. Try to achieve an even coverage over the whole tank.

TIDY UP the base colour and camouflage colours with *Bronze Green* and *Worn Rubber*.

RUSSIAN UNIFORM

Drybrush



DRYBRUSH the tank with *Russian Uniform* to highlight the base colour. Lightly drybrush over the *Black Grey* to 'wear-in' the camouflage.

KHAKI GREY

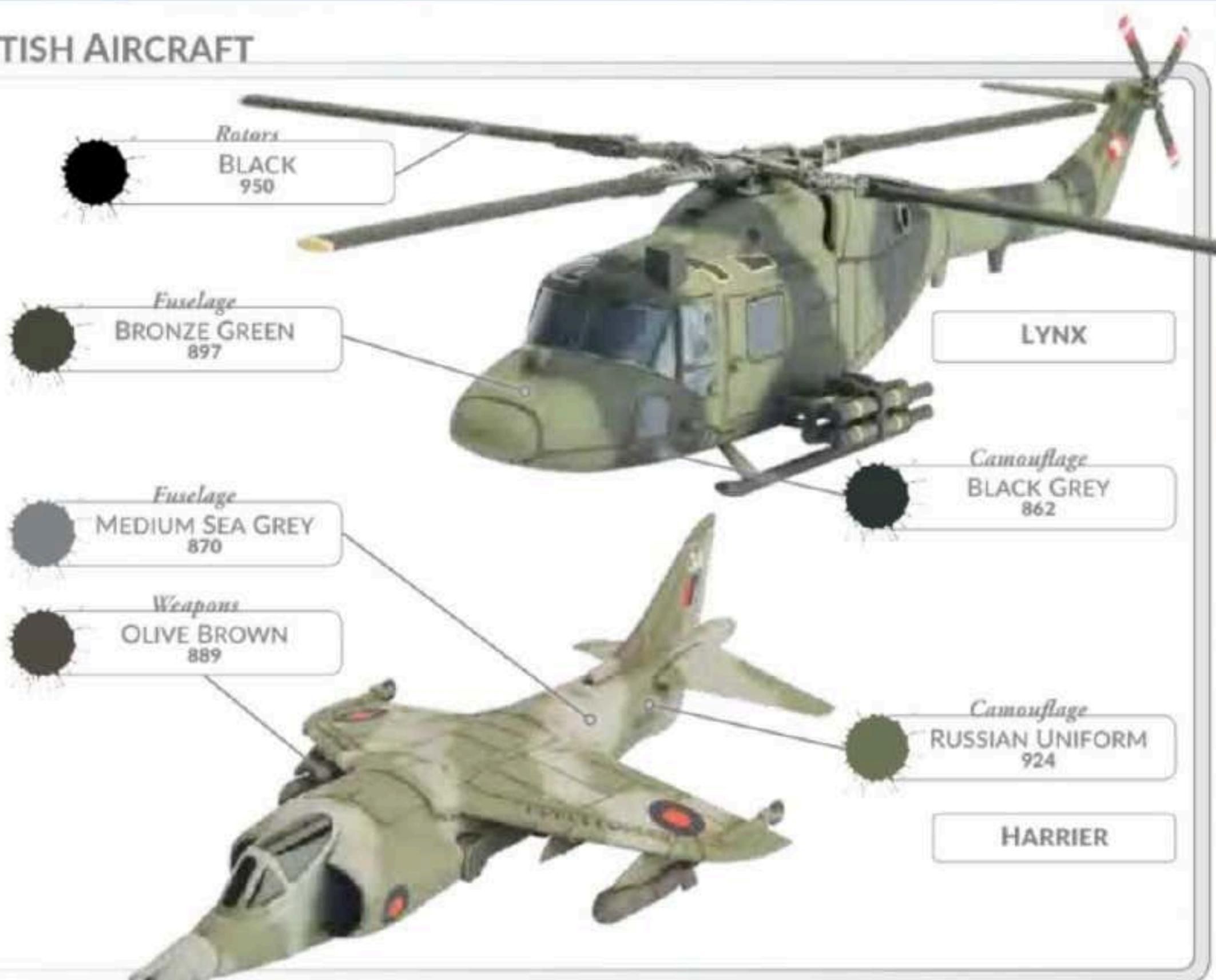
Fine Brush



PAINT the thermal sleeve on the barrel with *Khaki Grey* then wash with *Black Wash*. Dry brush with *Khaki Grey*.



BRITISH AIRCRAFT



BRITISH & COMMONWEALTH CAMOUFLAGE





WORLD WAR III BRITISH MARKINGS

The British have a more complex marking and unit numbering system than other NATO countries, which at a simple glance can be quite confusing.

The tank numbers and symbols follow a similar pattern to the British WWII tank marking system (see page ??). The colour of each shape denotes the regiment that the tank is from, while the shape of the marking denotes the squadron within the regiment.

Each Box of vehicles comes with a decal sheet specific to that vehicle type.

Since you are likely to want multiple boxes of each vehicle type, to give you more variety there are multiple variants of most of the decal sheets. One sheet will give you enough variety for a small force, and you should get more variety over the course of multiple boxes.

COMBAT VEHICLE RECONNAISSANCE (TRACKED)

Scorpion, Scimitar, Spartan, and Striker's are part of the Combat Vehicle Reconnaissance (Tracked), or CVR(T), family of vehicles. CVR(T) vehicles commonly either had a single number on the back of the turret, or a number on either side of the hull.

IRISH GUARDS (Scimitars)

DEATH OR GLORY (Scorpions)

HQ (Spartan) →

QUEENS DRAGOONS GUARDS (Spartans, Scorpions, Scimitars)

1st Platoon

2nd Platoon

3rd Platoon

4th Platoon

5th Platoon

TY012 RECCE © Battlefront Miniatures

FV432 MARKINGS



The FV432 randomly comes with either the TY015-A or TY015-B decal sheet. A single sheet gives you decals for up to:

- 9x FV432 transports,
- 3x Swingfires,
- 4x FV432 Milan section transports, or Spartan MCT's,
- 4x FV432 Mortar Section Transports.

The 2 sheets have a slightly different arrangement of numbers. One sheet will give you enough decals for your force. Both sheets will give you all the variety you need. If you are building a Mechanised Rifle Company you'll need several boxes, so odds on you'll get at least one of each sheet.

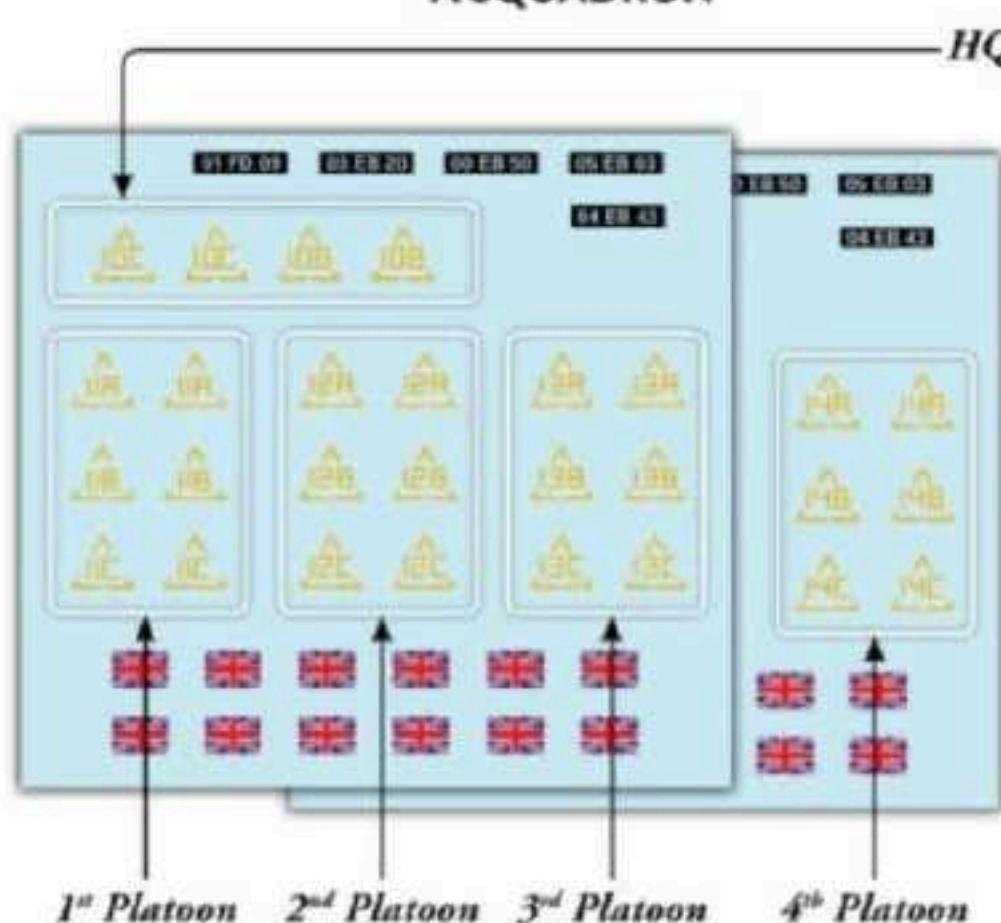


CHIEFTAIN MARKINGS

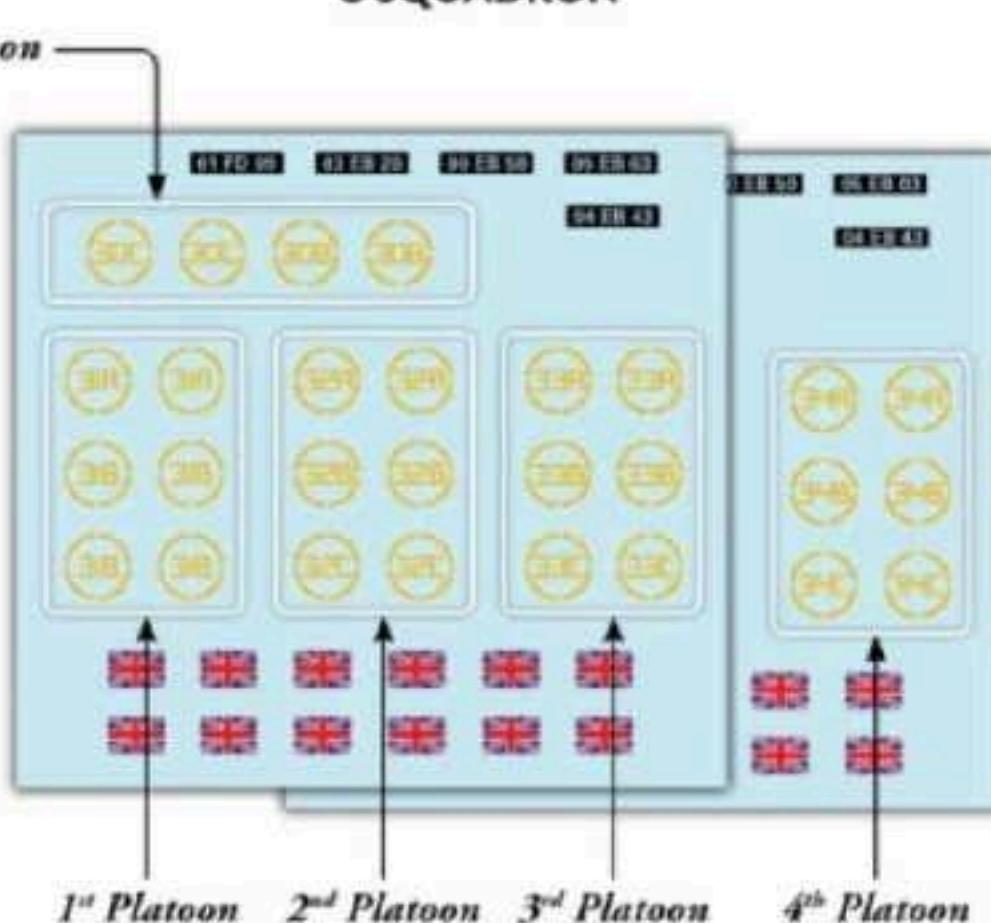
TBRAB01 Charlic's Chieftains army box and **TBBX01** Chieftain platoon come with 1 of 4 random decals that allows you to mark your vehicles from either A Squadron or C Squadron of the 17/21st Lancers, 'Death or Glory Boys'.

Each Decal sheet comes with enough decals for 5 vehicles that you can mark with 11 unique numbers, meaning that you are guaranteed to be able to give at least three platoons and your HQ markings from the same Squadron, and more boxes should give you more variety.

A SQUADRON

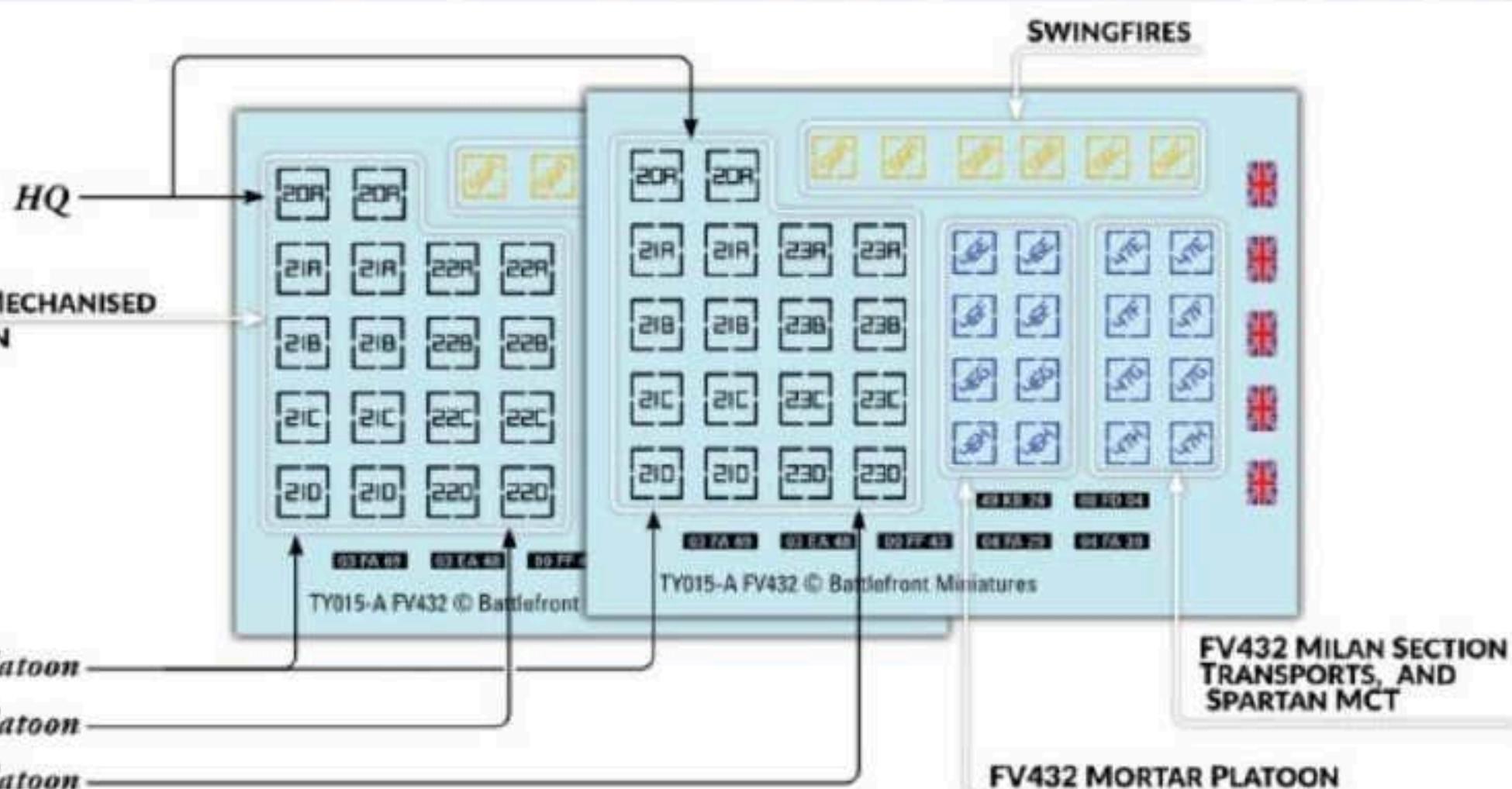


C SQUADRON



SUPPORT VEHICLES

TBBX06 Abbot Field Battery, **TBBX07** Tracked Rapier SAM Section, and **TBBX08** M109 Field Battery also come with this decal sheet as support vehicles were often marked in the same way as the tank squadrons, so if you end up with a good variety of decals you can mark your Chieftains from one squadron and us the other squadrons markings for your support vehicles.





BRITISH INFANTRY



CAMOUFLAGE UNIFORMS



BASECOAT the uniform with Uniform Green, using two thin coats if necessary to achieve an even coverage.



WASH the figure liberally with Black Wash to add depth to the uniform.



HIGHLIGHT raised areas with Uniform Green.



CAMOUFLAGE with small stripes of Sand Yellow covering about half of the uniform.



CAMOUFLAGE with Flat Brown stripes in the opposite direction to the Sand Yellow.



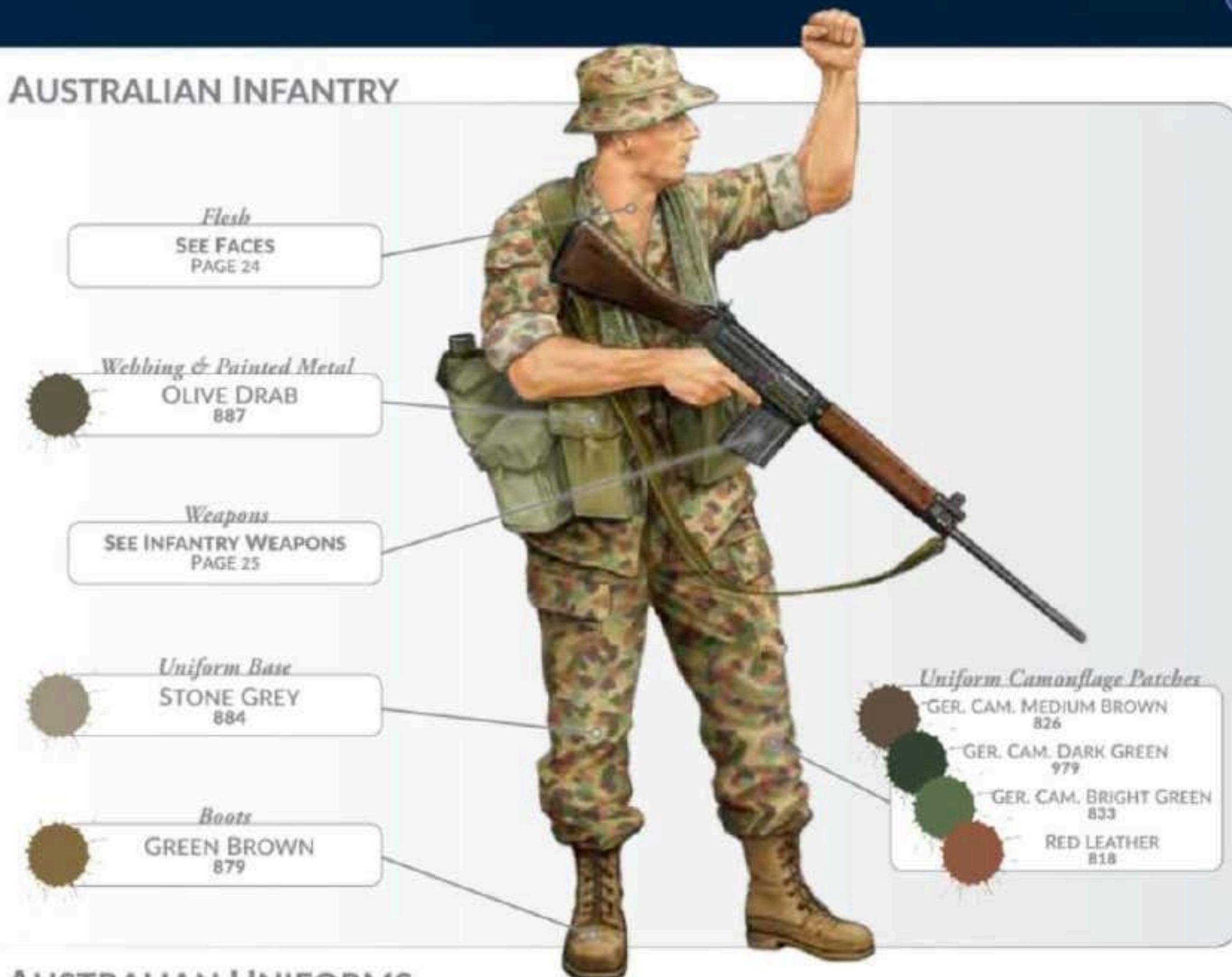
CAMOUFLAGE some small branch shapes in Black.

British soldiers DPM (Disruptive Pattern Material) wore camouflage uniforms. The pattern was developed for the Denison smock worn by paratroopers in WWII.





AUSTRALIAN INFANTRY



AUSTRALIAN UNIFORMS

COLOUR PALETTE	STONE GREY & OLIVE DRAB Large Brush	BLACK WASH Large Brush	STONE GREY Fine Brush
STONE GREY 884			
BLACK WASH 201			
OLIVE DRAB 887			
GER. CAM. MEDIUM BROWN 826			
GER. CAM. DARK GREEN 979			
GER. CAM. BRIGHT GREEN 833			
RED LEATHER 818			

BASECOAT the uniform with Stone Grey and the web gear with Olive Drab.

WASH the figure liberally with Black Wash to add depth to the uniform.

HIGHLIGHT raised areas on the uniform with Stone Grey.

HIGHLIGHT raised areas on the web gear with Olive Drab.

CAMOUFLAGE with small dots of German Camo Medium Brown and German Camo Dark Green.

CAMOUFLAGE with small dots of German Camo Bright Green and Red Leather.

ACTUAL SIZE



NATO

"Reports of NATO mobilisation have been flooding in from all over Europe. The Bundeswehr have mobilised their regular forces and massive troop movements have been observed as Federal units move up to the eastern border. American, British, Dutch, Belgian, and Danish troops have also begun taking up positions in the Federal Republic."

The defence of Western Europe was not just in the hands of West Germany, the United States, and Britain, but in fact the responsibility of all NATO's members. European NATO partners, like the Netherlands and France, took major responsibilities in NATO defensive plans. In addition, North America was not just represented by the United States, but also by their Canadian neighbours to the north.





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OLIVE DRAB VEHICLES

COLOUR PALETTE



OLIVE DRAB
887



BLACK WASH
201



GREEN BROWN
879

OLIVE DRAB

Large Brush



BASECOAT with Olive Drab. Two or three thin coats are preferable to one thick coat. Alternatively you can use an Olive Drab spray can for your undercoat.

BLACK WASH

Large Brush



WASH the vehicle with Black Wash. Try to achieve an even coverage over the whole vehicle, letting the wash pool in the recesses without building up on flat surfaces.

OLIVE DRAB

Large Brush



TIDY UP the wash with Olive Drab (see page 13) using a combination of drybrushing and layering, while leaving the recesses dark.

**50% OLIVE DRAB
50% GREEN BROWN**

Small Drybrush



DRYBRUSH the vehicle with a mix of Olive Drab and Green Brown, concentrating on edges, raised details and upper surfaces, to add highlights.

From the 1950s, all of the vehicles in the Bundeswehr were painted in overall Gelbliv (Yellow Olive). They started transitioning to three colour NATO camouflage in the early 80s, but there were still examples of overall Gelbliv as late as 1989.

A large portion of the Canadian and Dutch armies were also painted in Olive Drab.



NATO 3 COLOUR CAMOUFLAGE

COLOUR PALETTE



REFLECTIVE GREEN

Large Brush



BLACK GREY

Large Brush



BASECOAT your tank with Reflective Green. Two thin coats are preferable to one thick coat. Alternatively you can use a Reflective Green spray can for your undercoat.

FLAT EARTH

Large Brush



IRAQI SAND

Large Drybrush



PAINT Patches of Flat Earth following the paint templates.

GER. CAM. MEDIUM BROWN

Large Brush



BLACK GREY

Small Brush



BASECOAT your tracks with Ger. Cam. Medium Brown. Keep the tracks separate to make them easier to paint. Remember that the top of the track will be hidden by the track guards.

IRAQI SAND

Small Drybrush



BLACK WASH

Small Brush



DRYBRUSH the lower areas of the tank, concentrating on the flat surfaces, to give the effect of heavy dust.

Adding decals before drybrushing the Iraqi Sand will help give it the 'painted-on' look

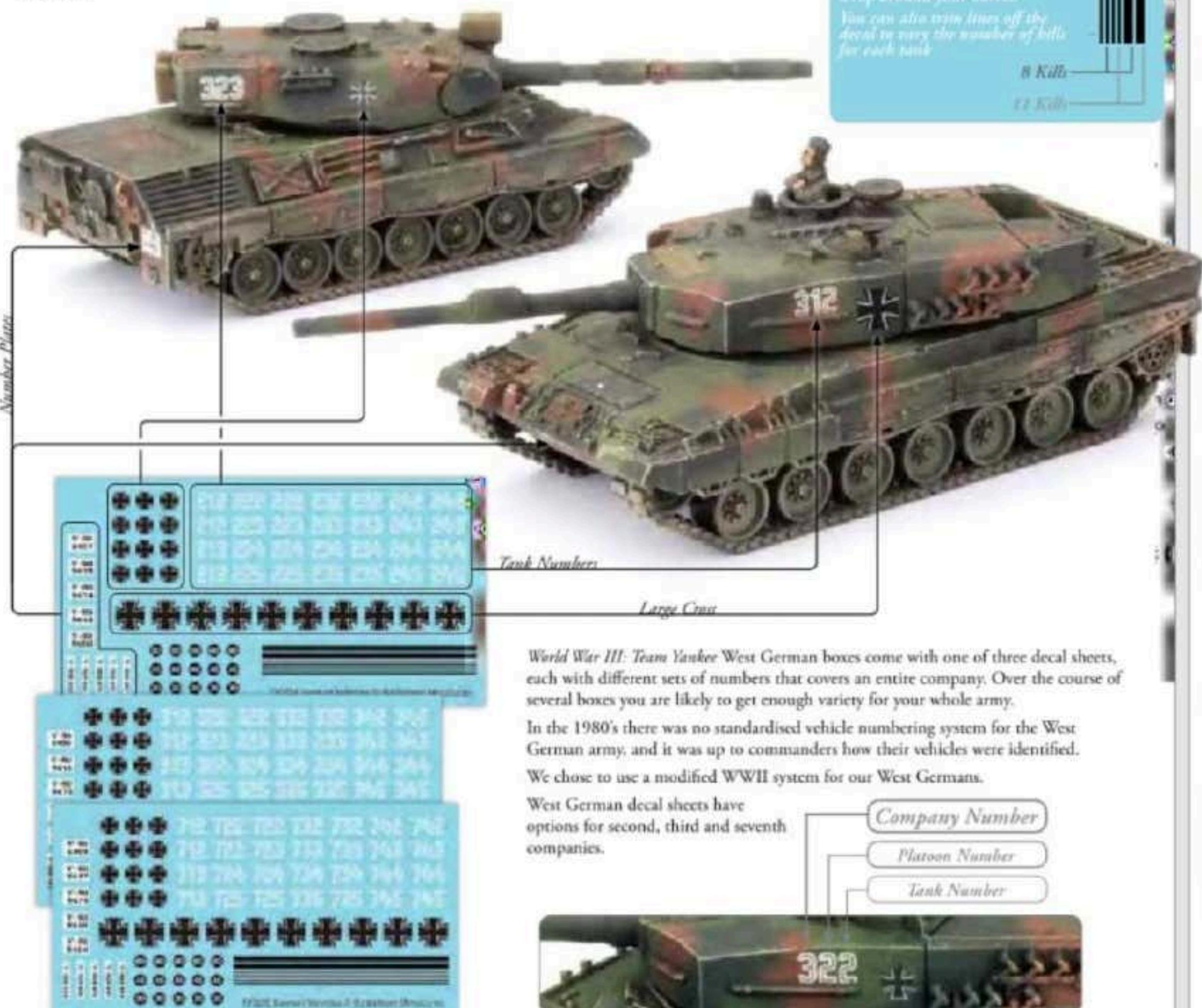
TARGET WASH the details with Black Wash to add definition to the vehicle. You may find it easier to apply your target wash if you give the vehicle a coat of gloss varnish first, this will help dull-down the edge highlights if they are a bit bright.



WEST GERMAN TANK MARKINGS

Tactical markings are an excellent way of adding visual and historical interest to your models.

In the Team Yankee novel, Bannon's Combat Command started applying WWII German style kill rings for morale purposes. It was such a cool idea that we decided to add them to the German and American Decal sheets too.



West German decal sheets have options for second, third and seventh companies.

World War III: Team Yankee West German boxes come with one of three decal sheets, each with different sets of numbers that covers an entire company. Over the course of several boxes you are likely to get enough variety for your whole army.

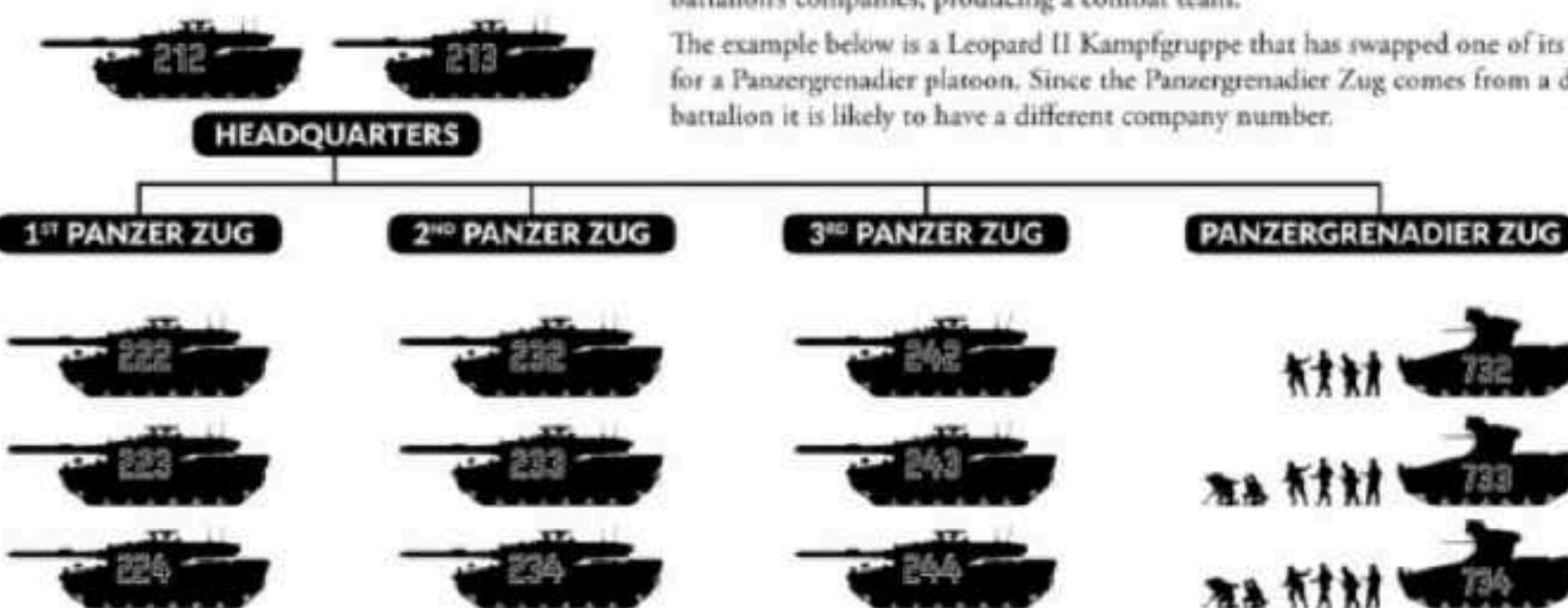
In the 1980's there was no standardised vehicle numbering system for the West German army, and it was up to commanders how their vehicles were identified. We chose to use a modified WWII system for our West Germans.

West German decal sheets have options for second, third and seventh companies.



Like the American Army, the German Army cross-attached tank and mechanised infantry companies between battalions, giving each type some integral support from the other. These companies further cross-attached a platoon with one of their host battalion's companies, producing a combat team.

The example below is a Leopard II Kampfgruppe that has swapped one of its platoons for a Panzergrenadier platoon. Since the Panzergrenadier Zug comes from a different battalion it is likely to have a different company number.





NATO INFANTRY



FRANCE



CANADA



NETHERLANDS



FRENCH FUSILIER

Rifle Stocks & Helmets

REFLECTIVE GREEN

890

Flesh

SEE FACES

PAGE 24

Webbing & Painted Metal

OLIVE DRAB

887

Rifles, SMGs, & MGs

SEE INFANTRY WEAPONS

PAGE 25

Webbing & Painted Metal

OLIVE BROWN

889

Uniform

GERMAN FIELD GREY

830

Boots

BLACK GREY

862

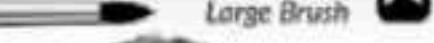
NATO UNIFORMS & WEBBING EQUIPMENT

COLOUR PALETTE

GERMAN FIELD GREY
830OLIVE DRAB
887BLACK WASH
201STONE GREY
884KHAKI GREY
880

GERMAN FIELD GREY

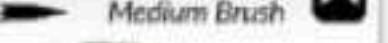
Large Brush



BASECOAT the uniform German Field Grey, using two thin coats if necessary to achieve an even coverage.

OLIVE DRAB

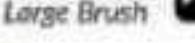
Medium Brush



BASECOAT all webbing equipment with Olive Drab.

BLACK WASH

Large Brush



WASH the figure liberally with Black Wash to add depth to the uniform.

GERMAN FIELD GREY
OLIVE DRAB

Medium Brush



TIDY UP uniform and webbing with German Field Grey and Olive Drab, leaving shadows in the recessed areas.

KHAKI GREY

Medium Brush



DRYBRUSH the webbing areas with Khaki Grey.

75% GERMAN FIELD GREY
25% WORN CANVAS

Small Brush



ACTUAL SIZE



HIGHLIGHT raised areas of the uniform for a brighter, higher-contrast look.

The uniform of most NATO soldiers is a plain olive-green colour.

Try adding a bit of Worn Canvas to the basecoat for some of the soldiers to represent older sun faded uniforms.



GERMAN INSIGNIA



WEST GERMAN



COLOUR PALETTE



FLAT FLESH
955



DEEP YELLOW
915



FLAT RED
957



BLACK
950



GERMAN FIELD GREY
830

DEEP YELLOW

Small Brush



PAINT a small square of Deep Yellow.
TIP: Underpaint with Flat Flesh for a bright, rich yellow.

FLAT RED BLACK

Small Brush



LAYER thin lines on Flat Red and Black over the Deep Yellow basecoat.

GERMAN FIELD GREY

Small Brush



TIDY UP the edges of the insignia with German Field Grey.

Shoulder flags are an iconic feature of Cold War West Germans and add a lot of flair to your miniatures. With a little practice they can be quite easy to do.

NATO VEHICLE GALLERY



AMERICAN
M1A1 ABRAMS



WEST GERMAN
LEOPARD 1



FRENCH
AMX-30



WEST GERMAN
MARDER



WARSAW PACT

"A meeting of the Warsaw Pact ministers ended today with a pledge to stand together in the face of threats and increased war preparations on the part of the United States. Representatives from Poland, the German Democratic Republic, Hungary, Bulgaria, Czechoslovakia, and the Soviet Union released a joint statement pledging to meet American aggression against any member state with retaliation in kind."

- TASS news release, 28 July

The 1970s saw a huge build up of military strength on both sides of the Iron Curtain, along with intensive efforts to modernise the ground forces' weaponry. Now in 1985, both NATO and the Warsaw Pact have huge armies deployed and ready to fight, with even more in reserve. The latest weapons are being deployed in ever-increasing numbers.

The main Soviet forces are the Group of Soviet Forces in Germany (GSFG) of 25 Soviet and German divisions in the GDR, the Northern Group of Forces (NGF) of 16 divisions in Poland, and the Central Group of Forces (CGF) of 15 divisions in Czechoslovakia, a total of 56 divisions with around 13,000 tanks. This doesn't count the divisions in the western parts of the Soviet Union that will form the immediate follow-on waves.





EAST GERMAN ARMOUR
PAGE 130

INFANTRY WEAPONS
PAGE 25

DECALS
PAGE 30



TANK TRACKS
PAGE 29

SOVIET ARMOUR
PAGE 128

PAINTING BLACK
PAGE 29

WEATHER EFFECTS
PAGE 33





SOVIET ARMOUR

T-64

MAIN BATTLE TANK



T-72

MAIN BATTLE TANK



COLOUR PALETTE



OLIVE DRAB
887



BLACK WASH
201



GREEN BROWN
879



BLACK GREY
862



IRAQI SAND
819

OLIVE DRAB

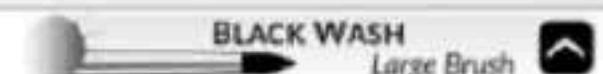
Large Brush



BASECOAT your tank with Olive Drab. Two thin coats are preferable to one thick coat. Alternatively you can use a Olive Drab spray can for your undercoat.

BLACK WASH

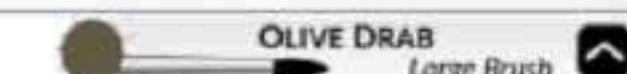
Large Brush



WASH the tank with Black Wash. Try to achieve an even coverage over the whole tank, letting the wash pool in the recesses without building up too much on flat surfaces.

OLIVE DRAB

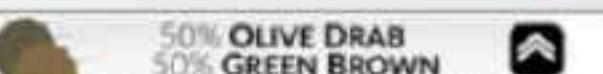
Large Brush



TIDY UP the basecoat with Olive Drab using a combination of drybrushing and layering, while leaving the recesses dark.

50% OLIVE DRAB
50% GREEN BROWN

Drybrush



DRYBRUSH the tank with a mix of Olive Drab and Green Brown, concentrating on the top surfaces, to simulate sun fading.

BLACK GREY

Large Brush



PAINT the rubber skirts with Black Grey. You may need to paint a coat of Black first to get good coverage.

IRAQI SAND

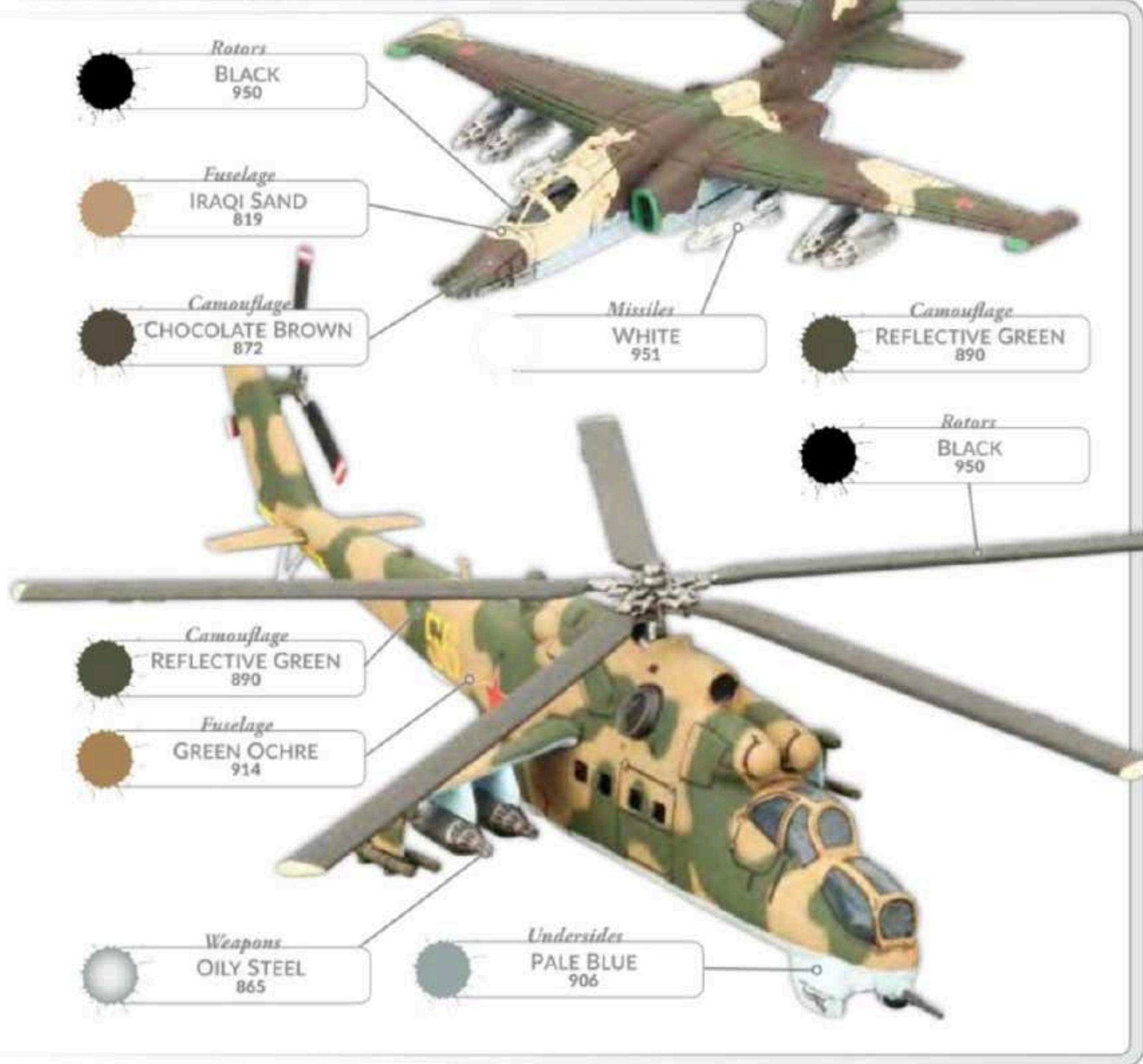
Drybrush



DRYBRUSH the tank with Iraqi Sand, concentrating on edges and the bottom of the hull to finish weathering the vehicle. **WASH** the details with Black Wash to add definition.



SOVIET AIRCRAFT



T-72

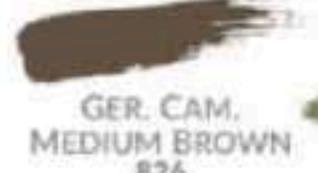


SA-13 GOPHER



VOLKSARMEE 3-COLOUR CAMOUFLAGE

COLOUR PALETTE

REFLECTIVE GREEN
890BLACK GREY
862SKY GREY
989IRAQI SAND
819GER. CAM.
MEDIUM BROWN
826BLACK WASH
201

REFLECTIVE GREEN

Large Brush



BLACK GREY

Large Brush



BASECOAT your tank with Reflective Green. Two thin coats are preferable to one thick coat. Alternatively you can use a Reflective Green spray can for your undercoat.

SKY GREY

Large Brush



IRAQI SAND

Large Drybrush



PAINT Patches of Sky Grey in a similar way to the Black Grey.

DRYBRUSH the tank with Iraqi Sand, concentrating on edges, raised details, and upper surfaces to add highlights.

GER. CAM. MEDIUM BROWN

Large Brush



BLACK WASH

Small Brush



BASECOAT your tracks with Ger. Cam. Medium Brown. Keep the tracks separate to make them easier to paint. Remember that the top of the track will be hidden by the track guards.

IRAQI SAND

Small Drybrush



BLACK WASH

Small Brush



DRYBRUSH the lower areas of the tank, concentrating on the flat surfaces, to give the effect of heavy Iraqi Sand.

Adding decals before drybrushing the Iraqi Sand will help give it the 'painted-on' look

TARGET WASH the details with Black Wash to add definition to the vehicle. You may find it easier to apply your target wash if you give the vehicle a coat of gloss varnish first.



CZECHOSLOVAKIAN

VEHICLE COLOURS

Fuselage
STONE GREY
884

This Mi-24 Hind colour scheme can be used for East Germans as well.

Camouflage
RUSSIAN UNIFORM
924

PALE BLUE
906

REFLECTIVE GREEN
890

GER. CAM. MEDIUM BROWN
826

GREEN OCHRE
914

STONE GREY
884

POLISH VEHICLES

BRONZE GREEN
897

Camouflage
RUSSIAN UNIFORM
924

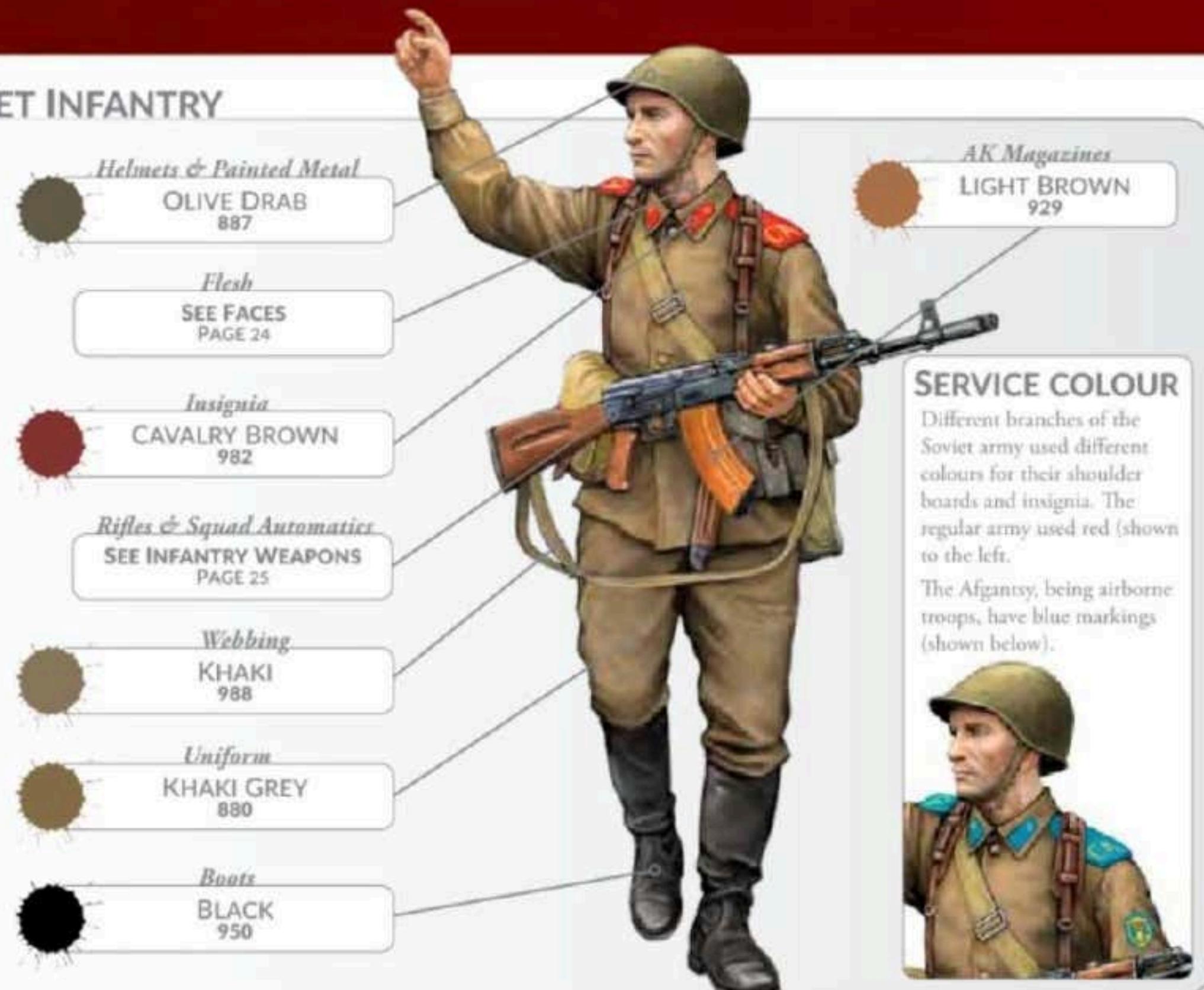
SKY GREY
989

PALE BLUE
906

OLIVE DRAB
887



SOVIET INFANTRY



SOVIET UNIFORMS



BASECOAT the uniform Khaki Grey, using two thin coats if necessary to achieve an even coverage.



WASH the figure liberally with Black Wash to add depth to the uniform.



TIDY UP the uniform with Khaki Grey, leaving dark shadows in the recessed areas.



HIGHLIGHT the edges and raised folds of the uniform with Khaki.



PAINT the shoulder boards and collar tabs Cavalry Brown.

Although of a different cut, the Soviet Army uniform of the 1980s was remarkably similar to the plain, basic uniforms of the Second World War.



EAST GERMAN UNIFORMS

COLOUR PALETTE

GER. CAM. BEIGE
821BLACK WASH
201IRAQI SAND
819

GER. CAM. BEIGE

Large Brush



BASECOAT the uniform Ger. Cam. Beige, using two thin coats if necessary to achieve an even coverage.

BLACK WASH

Large Brush



WASH the figure liberally with Black Wash to add depth to the uniform.

GER. CAM. BEIGE

Medium Brush



TIDY UP the uniforms with Ger. Cam. Beige, leaving dark shadows in the recessed areas.

IRAQI SAND

Fine Brush



HIGHLIGHT the edges and raised folds of the uniform with Iraqi Sand.

The East German uniforms had a subtle camouflage pattern. From a distance the camouflage pattern blends into the rest of the uniform, so don't feel as though you have to paint it.



EAST GERMAN CAMOUFLAGE

COLOUR PALETTE

IRAQI SAND
819BLACK WASH
201GER. CAM.
MEDIUM BROWN
826

IRAQI SAND

Medium Brush



BASECOAT the uniform Iraqi Sand, using two thin coats if necessary to achieve an even coverage.

BLACK WASH

Fine Brush



WASH the figure liberally with Black Wash to add depth to the uniform.

IRAQI SAND

Fine Brush



TIDY UP the uniform with Iraqi Sand, leaving dark shadows in the recessed areas.

GER. CAM. MEDIUM BROWN

Fine Brush

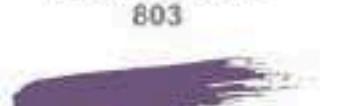
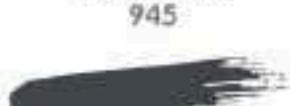
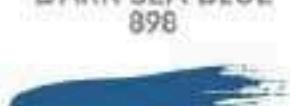
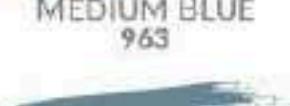
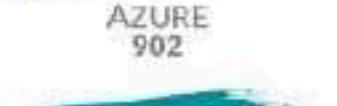
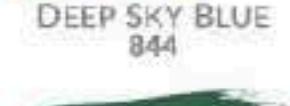
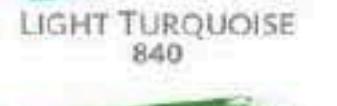
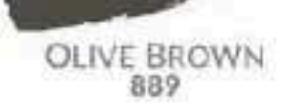
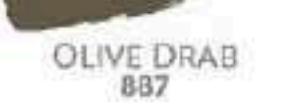


PAINT vertical streaks on the uniform. The thinner and closer together the streaks are the more accurate the uniform will look.

If you want to attempt to paint the camouflage, start with a lighter colour and add dark brown vertical stripes.



THE MODEL COLOUR RANGE

					
WHITE 951	FOUNDATION WHITE 919	GLOSS WHITE 842	OFF WHITE 820	IVORY 918	LIGHT FLESH 928
					
PALE SAND 837	BEIGE 917	SAND YELLOW 916	LIGHT YELLOW 949	LEMON YELLOW 952	GERMAN YELLOW 806
					
ICE YELLOW 858	DEEP YELLOW 915	FLAT YELLOW 953	GOLDEN YELLOW 948	BASIC SKINTONE 815	FLAT FLESH 955
					
DARK FLESH 927	SUNNY SKINTONE 845	MEDIUM FLESHTONE 860	LIGHT ORANGE 911	GERMAN ORANGE 805	BRIGHT ORANGE 851
					
CLEAR ORANGE 956	SCARLET 817	ORANGE RED 910	VERMILLION 909	DARK VERMILLION 947	CARMINE RED 908
					
FLAT RED 957	DARK RED 946	RED 926	BURNT RED 814	BLACK RED 859	BEIGE RED 804
					
SALMON ROSE 835	BROWN ROSE 803	OLD ROSE 944	PINK 958	SUNSET RED 802	MAGENTA 945
					
VIOLET RED 812	PURPLE 959	ROYAL PURPLE 810	BLUE VIOLET 811	VIOLET 960	DARK SEA BLUE 898
					
OXFORD BLUE 807	DARK PRUSSIAN BLUE 899	PRUSSIAN BLUE 965	BLUE 925	DARK BLUE 930	ROYAL BLUE 809
					
ULTRAMARINE 839	FLAT BLUE 962	MEDIUM BLUE 963	FIELD BLUE 964	FRENCH MIRAGE BLUE 900	INTERMEDIATE BLUE 903
					
GREY BLUE 943	AZURE 902	PASTEL BLUE 901	PALE BLUE 906	ANDREA BLUE 841	DEEP SKY BLUE 844
					
SKY BLUE 961	LIGHT TURQUOISE 840	TURQUOISE 966	BLUE GREEN 808	EMERALD 838	DEEP GREEN 920
					
PARK GREEN FLAT 969	INTERMEDIATE GREEN 891	LIGHT GREEN 942	GREEN SKY 974	LIME GREEN 827	YELLOW GREEN 954
					
GOLDEN OLIVE 857	GER. CAM. BRIGHT GREEN 833	MEDIUM OLIVE 850	OLIVE GREEN 967	FLAT GREEN 968	UNIFORM GREEN 922
					
GERMAN UNIFORM 920	LUFTWAFFE CAM. GREEN 823	YELLOW OLIVE 892	GUNSHIP GREEN 895	MILITARY GREEN 975	REFLECTIVE GREEN 890
					
OLIVE BROWN 889	OLIVE GREY 888	OLIVE DRAB 887	RUSSIAN UNIFORM 924	US DARK GREEN 893	CAM. OLIVE GREEN 894
					
GER. CAM. DARK GREEN 979	BRONZE GREEN 897	GERMAN CAM. EXTRA DARK GREEN 896	BLACK GREEN 980	GREEN GREY 886	GERMAN FIELD GREY WWII 830



METALLIC COLOURS, TRANSPARENT COLOURS, AND GLAZES



CONCLUSION

Thank you for taking the time to read *Colours Of War*. Even if you thought you had nothing left to learn about painting miniatures, we hope you have found something of interest. If you genuinely feel that the way you paint right now is 'good enough', then that's fantastic! By all means keep doing what you're doing. But since you picked up this book, it seems unlikely you are entirely satisfied. The fact is that everybody's painting can improve.

Stay interested in painting. That sounds obvious, but it's something a lot of grizzled veteran gamers have partly forgotten. If you go to tournaments, try to find time to admire other people's painted armies. You may pick up some useful tips or inspiration. But also, after all the hours that go into assembling and painting an army, it's gratifying and encouraging when that work does not go unnoticed.

Try not to be too satisfied with how you are painting right now. Always be on the lookout for new ideas and techniques. Painting and modelling is a vast subject, and there are a wealth of topics we have not yet covered: painting with an airbrush, 'pin washing' with oil-based paints, using pigments and weathering powders, and much more.

If you're just starting out, then you are lucky for a couple of reasons: you haven't settled into a rut yet, so you are open to new ideas; and you will inevitably get better just by practising. Look at other people's painted models a lot, and look at your own even more, especially while you are painting them. Think about your painting process and try to make each miniature look a little better than the one before it. Try not to get frustrated, because your painting will improve.

And most importantly, remember to enjoy yourself. So what are you still doing here? Go paint something!



COLOURS OF WAR

Welcome to *Colours Of War*, a detailed and comprehensive system for painting *World War II* and *World War III: Team Yankee* miniatures. Painting historical miniatures is a fun, creative and rewarding pastime. For historical wargamers everywhere, a beautifully painted miniature army is a joy to behold. And that is exponentially more true if you have the satisfaction of knowing that you painted it yourself. Whatever your level of experience or ability, the Battlefront studio has devised the *Colours of War* painting system to be useful to you.

This book will help you get the most out of your *Flames Of War* models, whether you have been painting wargaming miniatures for years or have just picked up a paintbrush for the first time.

Colours Of War is a holistic, integrated painting system, where the paint range and the painting guides have been developed simultaneously, designed to give great results with the smallest possible investment of time and effort.

No how-to guide can ever hope to transform you into a world-class painter overnight without practice and devotion, but this book, combined with its accompanying range of high-quality acrylic paints, is a good place to start.

A diverse assortment of resources can be found to tell you how to paint. So much information is out there that it can be confusing and difficult to know where to look. But *Colours Of War* brings all the crucial information and techniques together into one simple, easy-to-follow volume.

INSIDE YOU WILL FIND:

- Tips and tricks for preparation and assembly.
- Advice about the theory and practice of painting.
- Historical information about the equipment, colours and markings used by each of the five main combatant nations in *World War II*: Americans, German, British, Soviets, and Italians.
- Painting Guides for the main participants in *World War III: Team Yankee*: Americans, British, NATO, Soviets, and Warsaw Pact.
- How to base your miniatures for maximum impact.
- Step-by-step guides covering everything you need to get your armies painted and on to the table quickly and effectively.
- Tips and tricks developed by the Battlefront studio over years of experience.
- Inspirational colour photos.



BATTLEFRONT

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